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THE

PHILOSOPHICAL WORKS

OF

DAVID HUME

VOL. I.

David Hume
Philosophical
Works
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LONDON : PRINTED BY
SPOTTISWOODE AND CO., NEW-STREET SQUARE
AND PARLIAMENT STREET

THE

PHILOSOPHICAL WORKS

OF

DAVID HUME

EDITED BY

T. H. GREEN AND T. H. GROSE

FELLOW AND TUTOR OF BALLIOL COLLEGE, OXFORD

FELLOW AND TUTOR OF QUEEN'S COLLEGE, OXFORD

IN FOUR VOLUMES

VOL. I.

NEW EDITION

LONDON

LONGMANS, GREEN, AND CO.

1878

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A TREATISE ON HUMAN NATURE

AND

DIALOGUES CONCERNING NATURAL RELIGION

DAVID HUME

VOL. I.

LONDON : PRINTED BY
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A TREATISE

ON

HUMAN NATURE

BEING AN

ATTEMPT TO INTRODUCE THE EXPERIMENTAL METHOD

OF REASONING INTO MORAL SUBJECTS

AND

DIALOGUES CONCERNING NATURAL RELIGION

BY DAVID HUME

EDITED, WITH PRELIMINARY DISSERTATIONS AND NOTES, BY

T. H. GREEN AND T. H. GROSE

FELLOW AND TUTOR OF BALLIOL COLLEGE, OXFORD

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PREFACE.

In this edition we have sought to avoid the inconveniences which are apt to attend commentaries on philosophical writers, by the plan of putting together, in the form of continuous introductions, such explanation and criticism as we had to offer, and confining the footnotes almost entirely to references, which have been carefully distinguished from Hume's own notes. For the introductions to the first and second volumes Mr. Green alone is responsible. The introduction to the third is the work of Mr. Grose, who also has undertaken the revision of Hume's text.

Throughout the introductions to Volumes I. and II., except where the contrary is stated, 'Hume' must be understood to mean Hume as represented by the 'Treatise on Human Nature.' In taking this as intrinsically the best representation of his philosophy, we may be thought to have overlooked the well-known advertisement which (in an edition posthumously published) he prefixed to the volume containing his 'Inquiries concerning the Human Understanding and the Principles of Morals.' In it, after stating that the volume is mainly a reproduction of what he had previously published in the 'Treatise,' he expresses a hope that 'some negligences in his former reasoning, and more in the expression,' have been cor-

rected, and desires 'that the following Pieces may alone be regarded as containing his philosophical sentiments and principles.' Was not Hume himself then, it may be asked, the best judge of what was an adequate expression of his thoughts, and is there not an unbecoming assurance in disregarding such a voice from his tomb?

Our answer is that if we had been treating of Hume as a great literary character, or exhibiting the history of his individual mind, due account must have been taken of it. Such, however, has not been the object which, in the Introductions to Volumes I. and II., we have presented to ourselves. (See Introd. to Vol. I. § 4.) Our concern has been with him as the exponent of a philosophical system, and therefore specially with that statement of his system which alone purports to be complete, and which was written when philosophy was still his chief interest, without alloy from the disappointment of literary ambition. Anyone who will be at the pains to read the 'Inquiries' alongside of the original 'Treatise' will find that their only essential difference from it is in the way of omission. They consist in the main of excerpts from the 'Treatise,' re-written in a lighter style, and with the more difficult parts of it left out. It is not that the difficulties which logically arise out of Hume's system are met, but that the passages which most obviously suggest them have disappeared without anything to take their place. Thus in the 'Inquiry concerning the Human Understanding' there is nothing whatever corresponding to Parts II. and IV. of the first Book of the 'Treatise.' The effect of this omission on a hasty reader is, no doubt, a feeling of great relief. Common-sense is no longer actively repelled by a doctrine which seems to undermine the real world, and

can more easily put a construction on the account of the law of causation, which remains, compatible with the 'objective validity' of the law—such a construction as in fact forms the basis of Mr. Mill's Logic. How inconsistent this construction is with the principles from which Hume started, and which he never gave up; how impossible it would be to anyone who had assimilated his system as a whole; how close is the organic connection between all the parts of this as he originally conceived it—we must trust to the following introductions to show. (See, in particular, Introd. to Vol. I. §§ 301 and 321.)

The only discussion in the 'Inquiry concerning Human Understanding,' to which nothing in his earlier publication corresponds, is that on Miracles. On the relation in which this stands to his general theory some remarks will be found in the Introduction to Vol. I. (§ 324, note). The chief variations, other than in the way of omission, between the later redaction of his ethical doctrine and the earlier, are noticed in the Introduction to Vol. II. (§§ 31, 43, and 46, and notes).

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INTRODUCTION.

How the history of philosophy should be studied.

THERE is a view of the history of mankind, by this time familiarised to Englishmen, which detaches from the chaos of events a connected series of ruling actions and beliefs—the achievement of great men and great epochs, and assigns to these in a special sense the term 'historical.' According to this theory—which indeed, if there is to be a theory of History at all, alone gives the needful simplification—the mass of nations must be regarded as left in swamps and shallows outside the main stream of human development. They have either never come within the reach of the hopes and institutions which make history a progress instead of a cycle, or they have stiffened these into a dead body of ceremony and caste, or at some great epoch they have failed to discern the sign of the times and rejected the counsel of God against themselves. Thus permanently or for generations, with no principle of motion but unsatisfied want, without the assimilative ideas which from the strife of passions elicit moral results, they have trodden the old round of war, trade, and faction, adding nothing to the spiritual heritage of man. It would seem that the historian need not trouble himself with them, except so far as relation to them determines the activity of the progressive nations.

2. A corresponding theory may with some confidence be applied to simplify the history of philosophical opinion. The common plan of seeking this history in compendia of the systems of philosophical writers, taken in the gross or with no discrimination except in regard to time and popularity, is mainly to blame for the common notion that metaphysical enquiry is an endless process of threshing old straw. Such enquiry is really progressive, and has a real history, but it is a history represented by a few great names. At rare epochs there appear men, or sets of men, with the true speculative

Hume the last great English philosopher.

impulse to begin at the beginning and go to the end, and with the faculty of discerning the true point of departure which previous speculation has fixed for them. The intervals are occupied by commentators and exponents of the last true philosopher, if it has been his mission to construct; if it has been sceptical, by writers who cannot understand the fatal question that he has asked, and thus still dig in the old vein which he had exhausted, and of which his final dilemma had shown the bottom. Such an interval was that which in the growth of continental philosophy followed on the epoch of Leibnitz; an interval of academic exposition or formulation, in which the system, that had been to the master an incomplete enquiry, became in the hands of his disciples a one-sided dogmatism. In the line of speculation more distinctively English, a like *régime* of 'strenua inertia' has prevailed since the time of Hume. In the manner of its unprofitableness, indeed, it has differed from the Wolfian period in Germany, just as the disinterested scepticism of Hume differed from the system-making for purposes of edification to which Leibnitz applied himself. It has been unprofitable, because its representatives have persisted in philosophising upon principles which Hume had pursued to their legitimate issue and had shown, not as their enemy but as their advocate, to render all philosophy futile. Adopting the premises and method of Locke, he cleared them of all illogical adaptations to popular belief, and experimented with them on the body of professed knowledge, as one only could do who had neither any twist of vice nor any bias for doing good, but was a philosopher because he could not help it.

Kant his true successor.

3. As the result of the experiment, the method, which began with professing to explain knowledge, showed knowledge to be impossible. Hume himself was perfectly cognisant of this result, but his successors in England and Scotland would seem so far to have been unable to look it in the face. They have either thrust their heads again into the bush of uncriticised belief, or they have gone on elaborating Hume's doctrine of association, in apparent forgetfulness of Hume's own proof of its insufficiency to account for an intelligent, as opposed to a merely instinctive or habitual, experience. An enquiry, however, so thorough and passionless as the 'Treatise of Human Nature,' could not be in vain; and if no English athlete had strength to carry on the torch, it was transferred

to a more vigorous line in Germany. It awoke Kant, as he used to say, from his 'dogmatic slumber,' to put him into that state of mind by some called wonder, by others doubt, in which all true philosophy begins. This state, with less ambiguity of terms, may be described as that of freedom from presuppositions. It was because Kant, reading Hume with the eyes of Leibnitz and Leibnitz with the eyes of Hume, was able to a great extent to rid himself of the presuppositions of both, that he started that new method of philosophy which, as elaborated by Hegel, claims to set man free from the artificial impotence of his own false logic, and thus qualify him for a complete interpretation of his own achievement in knowledge and morality. Thus the 'Treatise of Human Nature' and the 'Critic of Pure Reason,' taken together, form the real bridge between the old world of philosophy and the new. They are the essential 'Propædeutik,' without which no one is a qualified student of modern philosophy. The close correspondence between the two works becomes more apparent the more each is studied. It is such as to give a strong presumption that Kant had studied Hume's doctrine in its original and complete expression, and not merely as it was made easy in the 'Essays.' The one with full and reasoned articulation asks the question, which the other with equal fulness seeks to answer. It is probably because the question in its complete statement has been so little studied among us, that the intellectual necessity of the Kantian answer has been so little appreciated. To trace the origin and bring out the points of the question, in order to the exhibition of that necessity, will be the object of the following treatise. To do this thoroughly, indeed, would carry us back through Hobbes to Bacon. But as present limits do not allow of so long a journey, we must be content with showing Hume's direct filiation to Locke, who, indeed, sufficiently gathered up the results of the 'empirical' philosophy of his predecessors.

Distinction between literary history and the history of philosophical systems.

4. Such a task is very different from an ordinary undertaking in literary history, and requires different treatment. To the historian of literature a philosopher is interesting, if at all, on account of the personal qualities which make a great writer, and have a permanent effect on letters and general culture. Locke and Hume undoubtedly had these qualities and produced such an effect—an effect in Locke's case more

intense upon the immediately following generations, but in Hume's more remarkable as having reappeared after near a century of apparent forgetfulness. Each, indeed, like every true philosopher, was the mouth-piece of a certain system of thought determined for him by the stage at which he found the dialectic movement that constitutes the progress of philosophy, but each gave to this system the stamp of that personal power which persuades men. Their mode of expression had none of that academic or 'ex cathedra' character, which has made German philosophy almost a foreign literature in the country of its birth. They wrote as citizens and men of the world, anxious (in no bad sense) for effect; and even when their conclusions were remote from popular belief, still presented them in the flesh and blood of current terms used in the current senses. It is not, however, in their human individuality and its effects upon literature, but as the vehicles of a system of thought, that it is proposed here to treat them; and this purpose will best be fulfilled if we follow the line of their speculation without divergence into literary criticism or history, without remarks either on the peculiarities of their genius or on any of the secondary influences which affected their writings or arose out of them. For a method of this sort, it would seem, there is some need among us. We have been learning of late to know much more about philosophers, but it is possible for knowledge about philosophers to flourish inversely as the knowledge of philosophy. The revived interest which is noticeable in the history of philosophy may be an indication either of philosophical vigour or of philosophical decay. In those whom intellectual indolence, or a misunderstood and disavowed metaphysic, has landed in scepticism there often survives a curiosity about the literary history of philosophy, and the writings which this curiosity produces tend further to spread the notion that philosophy is a matter about which there has been much guessing by great intellects, but no definite truth is to be attained. It is otherwise with those who see in philosophy a progressive effort towards a fully-articulated conception of the world as rational. To them its past history is of interest as representing steps in this progress which have already been taken for us, and which, if we will make them our own, carry us so far on our way towards the freedom of perfect understanding; while to ignore them is not to

return to the simplicity of a pre-philosophic age, but to condemn ourselves to grope in the maze of 'cultivated opinion,' itself the confused result of those past systems of thought which we will not trouble ourselves to think out.

Object of the present enquiry.

5. The value of that system of thought, which found its clearest expression in Hume, lies in its being an effort to think to their logical issue certain notions which since then have become commonplaces with educated Englishmen, but which, for that reason, we must detach ourselves from popular controversy to appreciate rightly. We are familiar enough with these in the form to which adaptation to the needs of plausibility has gradually reduced them, but because we do not think them out with the consistency of their original exponents, we miss their true value. They do not carry us, as they will do if we restore their original significance, by an intellectual necessity to those truer notions which, in fact, have been their sequel in the development of philosophy, but have not yet found their way into the 'culture' of our time. An attempt to restore their value, however, if this be the right view of its nature, cannot but seem at first sight invidious. It will seem as if, while we talk of their value, we were impertinently trying to 'pull them to pieces.' But those who understand the difference between philosophical failures, which are so because they are anachronisms, and those which in their failure have brought out a new truth and compelled a step forward in the progress of thought, will understand that a process, which looks like pulling a great philosopher to pieces, may be the true way of showing reverence for his greatness. It is a Pharisaical way of building the sepulchres of philosophers to profess their doctrine or extol their genius without making their spirit our own. The genius of Locke and Hume was their readiness to follow the lead of Ideas: their spirit was the spirit of Rationalism—the spirit which, however baffled and forced into inconsistent admissions, is still governed by the faith that all things may ultimately be understood. We best do reverence to their genius, we most truly appropriate their spirit, in so exploring the difficulties to which their enquiry led, as to find in them the suggestion of a theory which may help us to walk firmly where they stumbled and fell.

Locke's problem and method.

6. About Locke, as about every other philosopher, the essential questions are, What was his problem, and what was

his method? Locke, as a man of business, gives us the answers at starting. His problem was the origin of 'ideas' in the individual man, and their connection as constituting knowledge: his method that of simply 'looking into his own understanding and seeing how it wrought.' These answers commend themselves to common sense, and still form the text of popular psychology. If its confidence in their value, as explained by Locke, is at all beginning to be shaken, this is not because, according to a strict logical development, they issued in Hume's unanswered scepticism, which was too subtle for popular effect, but because they are now open to a rougher battery from the physiologists. Our concern at present is merely to show their precise meaning, and the difficulties which according to this meaning they involve.

His notion of the 'thinking thing.'

7. There are two propositions on which Locke is constantly insisting: one, that the object of his investigation is *his own* mind; the other, that his attitude towards this object is that of mere observation. He speaks of his own mind, it is to be noticed, just as he might of his own body. It meant something born with, and dependent on, the particular animal organism that first saw the light at Wrington on a particular day in 1632. It was as exclusive of other minds as his body of other bodies, and he could only infer a resemblance between them and it. With all his animosity to the coarse spiritualism of the doctrine of innate ideas, he was the victim of the same notion which gave that doctrine its falsehood and grotesqueness. He, just as much as the untutored Cartesian, regarded the 'minds' of different men as so many different things; and his refutation of the objectionable hypothesis proceeds wholly from this view. Whether the mind is put complete into the body, or is born and grows with it; whether it has certain characters stamped upon it to begin with, or receives all its ideas through the senses; whether it is simple and therefore indiscerptible, or compound and therefore perishable—all these questions to Locke, as to his opponents, concern a multitude of 'thinking things' in him and them, merely individual, but happening to be pretty much alike.

This he will passively observe.

8. This 'thinking thing,' then, as he finds it in himself, the philosopher, according to Locke, has merely and passively to observe, in order to understand the nature of knowledge. 'I could look into nobody's understanding but my own to see how it wrought,' he says, but 'I think the intellectual

faculties are made and operate alike in most men. But if it should happen not to be so, I can only make it my humble request, in my own name and in the name of those that are of my size, who find their minds work, reason, and know in the same low way that mine does, that the men of a more happy genius will show us the way of their nobler flights.'—(Second Letter to Bishop of Worcester.) As will appear in the sequel, it is from this imaginary method of ascertaining the origin and nature of knowledge by passive observation of what goes on in one's own mind that the embarrassments of Locke's system flow. It was the function of Hume to exhibit the radical flaw in his master's method by following it with more than his master's rigour.

Is such observation possible?

9. As an observation of the 'thinking thing,' the 'philosophy of mind' seems to assume the character of a natural science, and thus at once acquires definiteness, and if not certainty, at least plausibility. To deny the possibility of such observation, in any proper sense of the word, is for most men to tamper with the unquestioned heritage of all educated intelligence. Hence the unpalatability of a consistent Positivism; hence, too, on the other side, the general conviction that the Hegelian reduction of Psychology to Metaphysics is either an intellectual juggle, or a wilful return of the philosophy, which psychologists had washed, to the mire of scholasticism. It is the more important to ascertain what the observation in question precisely means. What observes, and what is observed? According to Locke (and empirical psychology has never substantially varied the answer) the matter to be observed consists for each man firstly in certain impressions of his own individual mind, by which this mind from being a mere blank has become furnished—by which, in other words, his mind has become actually a mind; and, secondly, in certain operations, which the mind, thus constituted, performs upon the materials which constitute it. The observer, all the while, is the constituted mind itself. The question at once arises, how the developed man can observe in himself (and it is only to himself, according to Locke, that he can look) that primitive state in which his mind was a 'tabula rasa.' In the first place, that only can be observed which is present; and the state in question to the supposed observer is past. If it be replied that it is recalled by memory, there is the farther objection that memory only recalls

what has been previously known, and how is a man's own primitive consciousness, as yet void of the content which is supposed to come to it through impressions, originally known to him? How can the 'tabula rasa' be cognisant of itself?

Why it seems so.

10. The cover under which this difficulty was hidden from Locke, as from popular psychologists ever since, consists in the implicit assumption of certain ideas, either as possessed by or acting upon the mind in the supposed primitive state, which are yet held to be arrived at by a gradual process of comparison, abstraction, and generalisation. This assumption, which renders the whole system resting upon the interrogation of consciousness a paralogism, is yet the condition of its apparent possibility. It is only as already charged with a content which is yet (and for the individual, truly) maintained to be the gradual acquisition of experience, that the primitive consciousness has any answer to give to its interrogator.

Locke's account of origin of ideas.

11. Let us consider the passage where Locke sums up his theory of the 'original of our ideas.' (Book II. chap. i. sec. 23, 24.) 'Since there appear not to be any ideas in the mind, before the senses have conveyed any in, I conceive that ideas in the understanding are coeval with sensation; which is such an impression, made in some part of the body, as produces some perception in the understanding. It is about these impressions made on our senses by outward objects, that the mind seems first to employ itself in such operations as we call perception, remembering, consideration, reasoning, &c. In time the mind comes to reflect on its own operations about the ideas got by sensation, and thereby stores itself with a new set of ideas, which I call ideas of reflection. These impressions that are made on our senses by outward objects, that are extrinsical to the mind; and its own operations, proceeding from powers intrinsical and proper to itself, which, when reflected on by itself, become also objects of its contemplation, are, as I have said, the original of all knowledge.'

Its ambiguities. (*a*) In regard to sensation.

12. Can we from this passage elicit a distinct account of the beginning of intelligence? In the first place it consists in an 'idea,' and an idea is elsewhere (Introduction, sec. 8) stated to be 'whatsoever is the object of the understanding, when a man thinks.' But the primary idea is an 'idea of sensation.' Does this mean that the primary idea *is* a sen-

sation, or is a distinction to be made between the sensation and the idea thereof? The passage before us would seem to imply such a distinction. Looking merely to it, we should probably say that by *sensation* Locke meant 'an impression or motion in some part of the body;' by the *idea of sensation* 'a perception in the understanding,' which this impression produces. The account of perception itself gives a different result. (Book II. chap. ix. sec. 3.) 'Whatever impressions are made on the outward parts, if they are not taken notice of within, there is no perception. Fire may burn our bodies with no other effect than it does a billet, unless the motion be continued to the brain, and there the *sense* of heat or *idea* of pain be produced in the mind, wherein consists actual *perception*.' Here sensation is identified at once with the idea and with perception, as opposed to the impression on the bodily organs.[1] To confound the confusion still farther, in a passage immediately preceding the above, 'Perception,' here identified with the idea of sensation, has been distinguished from it, as 'exercised about it.' 'Perception, as it is the first faculty of the mind exercised about our ideas, so it is the first and simplest idea we have from reflection.' Taking Locke at his word, then, we find the beginning of intelligence to consist in having an idea of sensation. This idea, however, we perceive, and to perceive is to have an idea; i.e. to have an idea of an idea of sensation. But of perception again we have a simple or primitive idea. Therefore the beginning of intelligence consists in having an idea of an idea of an idea of sensation.

(*b*) In regard to ideas of reflection.

13. By insisting on Locke's account of the relation between the ideas of sensation and those of reflection we might be brought to a different but not more luminous conclusion. In the passages quoted above, where this relation is most fully spoken of, it appears that the latter are essentially sequent to those of sensation. '*In time* the mind comes to reflect on its own operations, about the ideas got by sensation, and thereby stores itself with a new set of ideas, which I call ideas of reflection.' Of these only two are primary and ori-

[1] Cf. Book II. chap. xix. sec. 1. 'The *perception*, which actually accompanies and is annexed to any impression on the body, made by an external object, being distinct from all other modifications of thinking, furnishes the mind with a distinct idea which we call *sensation*; which is, as it were, the actual entrance of any idea into the understanding by the senses.'

ginal (Book II. c. xxi. sec. 73), viz. motivity or power of moving, with which we are not at present concerned, and perceptivity or power of perception. But according to Locke, as we have seen, there cannot be any, the simplest, idea of sensation without perception. If, then, the *idea* of perception is only given later and upon reflection, we must suppose perception to take place without any idea of it. But with Locke to have an idea and to perceive are equivalent terms. We must thus conclude that the beginning of knowledge is an unperceived perception, which is against his express statement elsewhere (Book II. c. xxvii. sec. 9), that it is 'impossible for any one to perceive without perceiving that he does perceive.'

What is the 'tablet' impressed?

14. Meanwhile a perpetual equivocation is kept up between a supposed impression on the 'outward parts,' and a supposed impression on the 'tablet of the mind.' It is not the impression upon, or a motion in, the outward parts, as Locke admits, that constitutes the idea of sensation. It is not an agitation in the tympanum of the ear, or a picture on the retina of the eye, that we are conscious of when we see a sight or hear a sound.[1] The motion or impression, however, has only, as he seems to suppose, to be 'continued to the brain,' and it becomes an idea of sensation. Notwithstanding the rough line of distinction between soul and body, which he draws elsewhere, his theory was practically governed by the supposition of a cerebral something, in which, as in a third equivocal tablet, the imaginary mental and bodily tablets are blended. If, however, the idea of sensation, as an object of the understanding when a man thinks, differs absolutely from 'a motion of the outward parts,' it does so no less absolutely, however language and metaphor may disguise the difference, from such motion as 'continued to the brain.' An instructed man, doubtless, may come to think about a motion in his brain, as about a motion of the earth round the sun, but to speak of such motion as an idea of sensation or an immediate object of intelligent sense, is to confuse between the object of consciousness and a possible physical theory of the conditions of that consciousness. It is

[1] Cf. Locke's own statement (Book III. iv. sec. 10). 'The cause of any sensation, and the sensation itself, in all the simple ideas of one sense, are two ideas; and two ideas so different and distant one from another, that no two can be more so.'

only, however, by such an equivocation that any idea, according to Locke's account of the idea, can be described as an 'impression' at all, or that the representation of the mind as a tablet, whether born blank or with characters stamped on it, has even an apparent meaning. A metaphor, interpreted as a fact, becomes the basis of his philosophical system.

Does the mind make impressions on itself?

15. As applied to the ideas of reflection, indeed, the metaphor loses even its plausibility. In its application to the ideas of sensation it gains popular acceptance from the ready confusion of thought and matter in the imaginary cerebral tablet, and the supposition of actual impact upon this by 'outward things.' But in the case of ideas of reflection, it is the mind that at once gives and takes the impression. It must be supposed, that is, to make impressions on itself. There is the further difficulty that as perception is necessary in order to give *an idea* of sensation, the impress of perception must be taken by the mind in its earliest receptivity; or, in other words, it must impress itself while still a blank, still void of any 'furniture' wherewith to make the impression. There is no escape from this result unless we suppose perception to precede the idea of it by some interval of time, which lands us, as we have seen, in the counter difficulty of supposing an unperceived perception. Locke disguises the difficulty from himself and his reader by constantly shifting both the receptive subject and the impressive matter. We find the 'tablet' perpetually receding. First it is the 'outward part' or bodily organ. Then it is the brain, to which the impression received by the outward part must somehow be continued, in order to produce sensation. Then it is the perceptive mind, which takes an impression of the sensation or has an idea of it. Finally, it is the reflective mind, upon which in turn the perceptive mind makes impressions. But the hasty reader, when he is told that the mind is passively impressed with ideas of reflection, is apt to forget that the matter which thus impresses it is, according to Locke's showing, simply its perceptive, i.e. its passive, self.

Source of these difficulties.

16. The real source of these embarrassments in Locke's theory, it must be noted, lies in the attempt to make the individual consciousness give an answer to its interrogator as to the beginning of knowledge. The individual looking back on an imaginary earliest experience pronounces himself in that experience to have been simply sensitive and passive.

The 'simple' idea as Locke describes it, is a 'complex' idea of substance and relation.

But by this he means consciously sensitive *of something* and consciously passive *in relation to something*. That is, he supposes the primitive experience to have involved consciousness of a self on the one hand and of a thing on the other, as well as of a relation between the two. In the 'idea of sensation' as Locke conceived it, such a consciousness is clearly implied, notwithstanding his confusion of terms. The idea is a perception, or consciousness *of a thing*, as opposed to a sensation proper or affection of the bodily organs. Of the perception, again, there is an idea, i.e. a consciousness by the man, in the perception, of himself in negative relation to the thing that is his object, and this consciousness (if we would make Locke consistent in excluding an unperceived perception) must be taken to go along with the perceptive act itself. No less than this indeed can be involved in any act that is to be the beginning of knowledge at all. It is the minimum of possible thought or intelligence, and the thinking man, looking for this beginning in the earliest experience of the individual human animal, must needs find it there. But this means no less than that he is finding there already the conceptions of substance and relation. Hence a double contradiction: firstly, a contradiction between the primariness of self-conscious cognisance of a thing, as the beginning of possible knowledge, on the one hand, and the primariness of animal sensation in the history of the individual man on the other; secondly, a contradiction between the primariness in knowledge of the ideas of substance and relation, and the seemingly gradual attainment of these 'abstractions' by the individual intellect. The former of these contradictions is blurred by Locke in the two main confusions which we have so far noticed: (*a*) the confusion between sensation proper and perception, which is covered under the phrase 'idea of sensation;' a phrase which, if sensation means the first act of intelligence, is pleonastic, and if it means the 'motion of the outward parts continued to the brain,' is unmeaning; and (*b*) the confusion between the physical affection of the brain and the act of the self-conscious subject, covered under the equivocal metaphor of impression. The latter contradiction, that concerning the ideas of substance and relation, has to be further considered.

How this contradiction is disguised.

17. It is not difficult to show that to have a simple idea, according to Locke's account of it, means to have already the

conception of substance and relation, which are yet according to him 'complex and derived ideas,' 'the workmanship of the mind' in opposition to its original material, the result of its action in opposition to what is given it as passive. The equivocation in terms under which this contradiction is generally covered is that between 'idea' and 'quality.' 'Whatever the mind perceives in itself, or is the immediate object of perception, thought, or understanding, that I call *idea*; and the power to produce that idea I call quality of the subject wherein that power is. Thus a snowball having power to produce in us the ideas of white, cold, and round, the powers to produce these ideas in us, as they are in the snowball, I call qualities; and as they are sensations or perceptions in our understandings, I call them ideas; which ideas, if I speak of sometimes as in the things themselves, I would be understood to mean those qualities in the object which produce them in us.' (Book II. chap. viii. sec. 8.)

Locke's way of interchanging 'idea and 'quality,' and its effects.

18. An equivocation is not the less so because it is announced. It is just because Locke allows himself at his convenience to interchange the terms 'idea' and 'quality' that his doctrine is at once so plausible and so hollow. The essential question is whether the 'simple idea,' as the original of knowledge, is on the one hand a mere feeling, or on the other a thing or quality of a thing. This question is the crux of empirical psychology. Adopting the one alternative, we have to face the difficulty of the genesis of knowledge, as an apprehension of the real, out of mere feeling; adopting the other, we virtually endow the nascent intelligence with the conception of substance. By playing fast and loose with 'idea' and 'quality,' Locke disguised the dilemma from himself. Here again the metaphor of Impression did him yeoman's service. The idea, or 'immediate object of thought,' being confused with the affection of the sensitive organs, and this again being accounted for as the result of actual impact, it was easy to represent the idea itself as caused by the action of an outward body on the 'mental tablet.' Thus Locke speaks of the 'objects of our senses obtruding their particular ideas on our minds, whether we will or no.' (Book II. chap. i. sec. 25.) This sentence holds in solution an assumption and two fallacies. The assumption (with which we have no further concern here) is the physical theory that matter affects the sensitive organs in the way of actual

impact. Of the fallacies, one is the confusion between this affection and the idea of which it is the occasion to the individual; the other is the implication that this idea, as such, in its prime simplicity, recognises itself as the result of, and refers itself as a quality to, the matter supposed to cause it. This recognition and reference, it is clearly implied, are involved in the idea itself, not merely made by the philosopher theorising it. Otherwise the 'obtrusion' would be described as of a property or effect, not of an idea, which means, it must be remembered, the object of consciousness just as the object of consciousness. Of the same purport is the statement that 'the mind is furnished with simple ideas as they are found in exterior things. (Book II. chap. xxiii. sec. 1.) It only requires a moment's consideration, indeed, to see that the beginning of consciousness cannot be a physical theory, which, however true it may be and however natural it may have become to us, involves not only the complex conception of material impact, but the application of this to a case having no palpable likeness to it. But the 'interrogator of consciousness' finds in its primitive state just what he puts there, and thus Locke, with all his pains 'to set his mind at a distance from itself,' involuntary supposes it, in the first element of intelligence, to 'report' that action of matter upon itself, which, as the result of a familiar theory—involving not merely the conceptions of substance, power, and relation, but special qualifications of these—it reports to the educated man.

Primary and secondary qualities of bodies.

19. This will appear more clearly upon an examination of his doctrine of 'the ideas of primary and secondary qualities of bodies.' The distinction between them he states as follows. The primary qualities of bodies are 'the bulk, figure, number, situation, motion, and rest of their solid parts; these are in them, whether ws perceive them or no; and when they are of that size that we can discover them, we have by these an idea of the thing as it is in itself.' . . . Thus 'the ideas of primary qualities are resemblances of them, and their patterns do really exist in the bodies themselves. But the ideas produced in us by the secondary qualities have no resemblance of them at all. There is nothing like them existing in the bodies themselves. They are in the bodies, we denominate from them, only a power to produce these sensations in us; and what is sweet, blue, or warm in idea is but

the certain bulk, figure, and motion of the insensible parts in the bodies themselves which we call so.' This power is then explained to be of two sorts: (*a*) 'The power that is in any body, by reason of its insensible primary qualities, to operate after a peculiar manner on any of our senses, and thereby produce in us the different ideas of several colours, sounds, smells, tastes, &c. These are usually called sensible qualities. (*b*) The power that is in any body, by reason of the particular constitution of its primary qualities, to make such a change in the bulk, figure, texture, and motion of another body, as to make it operate differently on our senses from what it did before. Thus the sun has a power to make wax white, and fire to make lead fluid. These are usually called powers.' (Book II. chap. viii. sec. 15, 23.)

'Simple idea' represented as involving a theory of its own cause.

20. What we have here is a theory of the causes of simple ideas; but we shall find Locke constantly representing this theory as a simple idea itself, or the simple idea as involving this theory. By this unconscious device he is enabled readily to exhibit the genesis of knowledge out of 'simple ideas,' but it is at the cost of converting these into 'creations of the mind,' which with him are the antitheses of 'facts' or 'reality.' The process of conversion takes a different form as applied respectively to the ideas of primary and to those of secondary qualities. We propose to follow it in the latter application first.

Phrases in which this is implied.

21. The simple idea caused by a quality he calls the idea *of* that quality. Under cover of this phrase, he not only identifies the idea of a primary quality with the quality itself of which he supposes it to be a copy, but he also habitually regards the idea of a secondary quality as the consciousness of a quality *of a thing*, though under warning that the quality as it is to consciousness is not as it is in the thing. This reservation rather adds to the confusion. There are in fact, according to Locke, as appears from his distinction between the 'nominal' and 'real essence,' two different things denoted by every common noun; the thing as it is in itself or in nature, and the thing as it is for consciousness. The former is the thing as constituted by a certain configuration of particles, which is only an object for the physical philosopher, and never fully cognisable even by him;[1] the latter is the

[1] This distinction is more fully treated below, paragraphs 88, &c.

thing as we see and hear and smell it. Now to a thing in this latter sense, according to Locke, such a simple idea as to the philosopher is one of a secondary quality (i.e. not a copy, but an effect, of something in a body), is already in the origin of knowledge referred as a quality, though without distinction of primary and secondary. He does not indeed state this in so many words. To have done so might have forced him to reconsider his doctrine of the mere passivity of the mind in respect of simple ideas. But it is implied in his constant use of such phrases as 'reports of the senses,' 'inlet through the senses'—which have no meaning unless something is reported, something let in—and in the familiar comparison of the understanding to a 'closet, wholly shut from light, with only some little opening left, to let in external visible resemblances, or ideas, of things without.' (Book II. chap. xi. sec. 17.)

Feeling and felt thing confused.

22. Phraseology of this kind, the standing heritage of the philosophy which seeks the origin of knowledge in sensation, assumes that the individual sensation is from the first consciously representative; that it is more than what it is simply in itself—fleeting, momentary, unnameable (because, while we name it, it has become another), and for the same reason unknowable, the very negation of knowability; that it shows the presence of something, whether this be a 'body' to which it is referred as a quality, or a mind of which it is a modification, or be ultimately reduced to the permanent conditions of its own possibility. This assumption for the present has merely to be pointed out; its legitimacy need not be discussed. Nor need we now discuss the attempts that have been made since Locke to show that mere sensations, dumb to begin with, may yet become articulate upon repetition and combination; which in fact endow them with a faculty of inference, and suppose that though primarily they report nothing beyond themselves, they yet somehow come to do so as an explanation of their own recurrence. The sensational theory in Locke is still, so to speak, unsophisticated. It is true that, in concert with that 'thinking gentleman,' Mr. Molyneux, he had satisfied himself that what we reckon simple ideas are often really inferences from such ideas which by habit have become instinctive; but his account of this habitual process presupposes the reference of sensation to a thing. 'When we set before our eyes a round globe of any uniform colour, it is certain

that the idea thereby imprinted in our mind is of a flat circle, variously shadowed with several degrees of light and brightness coming to our eyes. But we having by use been accustomed to perceive what kind of appearance convex bodies are wont to make in us, what alterations are made in the reflections of light by the difference of the sensible figures of bodies; the judgment presently, by an habitual custom, alters the appearances into their causes. So that from that which truly is variety of colour or shadow, collecting the figure, it makes it pass for a mark of figure, and frames to itself the perception of a convex figure, and an uniform colour.' (Book II. chap. ix. sec. 8.) The theory here stated involves two assumptions, each inconsistent with the simplicity of the simple idea. (*a*) The actual impression of the 'plane variously coloured' is supposed to pronounce itself to be of something outward. Once call the sensation an 'impression,' indeed, or call it anything, and this or an analagous substantiation of it is implied. It is only as thus reporting something 'objective' that the simple idea of the plane variously coloured gives anything to be corrected by the 'perception of the kind of appearance convex bodies are wont to make in us,' *i.e.* 'of the alterations made in the reflections of light by the difference of the sensible figure of bodies.' This perception, indeed, as described, is already itself just the instinctive judgment which has to be accounted for, and though this objection might be met by a better statement, yet no statement could serve Locke's purpose which did not make assumption (*b*) that sensations of light and colour—'simple ideas of secondary qualities'—are in the very beginning of knowledge *appearances*, if not of *convex* bodies, yet of bodies; if not of bodies, yet of something which they reveal, which remains there while they pass away.

The simple idea as 'ectype' other than mere sensation.

23. The same assumption is patent in Locke's account of the distinction between 'real and fantastic,' 'adequate and inadequate,' ideas. This distinction rests upon that between the thing as archetype, and the idea as the corresponding ectype. Simple ideas he holds to be necessarily 'real' and 'adequate,' because necessarily answering to their archetypes. 'Not that they are all of them images or representations of what does exist: . . . whiteness and coldness are no more in snow than pain is: . . . yet are they real ideas in us, whereby we distinguish the qualities that are really in

things themselves. For these several appearances being designed to be the marks whereby we are to know and distinguish things which we have to do with, our ideas do as well serve us to that purpose, and are as real distinguishing characters, whether they be only constant effects, or else exact resemblances of something in the things themselves.' (Book II. chap. xxx. sec. 2.) The simple idea, then, is a 'mark' or 'distinguishing character,' either as a copy or as an effect, of something other than itself. Only as thus regarded, does the distinction between real and fantastic possibly apply to it. So too with the distinction between true and false ideas. As Locke himself points out, the simple idea in itself is neither true nor false. It can become so only as 'referred to something extraneous to it.' (Book II. chap. xxxii. sec. 4.) For all that, he speaks of simple ideas as true and necessarily true, because 'being barely such perceptions as God has fitted us to receive, and given power to external objects to produce in us by established laws and ways . . . their truth consists in nothing else but in such appearances as are produced in us, and must be suitable to those powers He has placed in external objects, or else they could not be produced in us.' (Book II. chap. xxxii. sec. 14.) Here again we are brought to the same point. The idea is an 'appearance' of something, necessarily true when it cannot seem to be the appearance of anything else than that of which it is the appearance. We thus come to the following dilemma. Either the simple idea is referred to a thing, as its pattern or its cause, or it cannot be regarded as either real or true. If it is still objected that it need not be so referred in the beginning of knowledge, though it comes to be so in the developed intelligence, the answer is the further question, how can that be knowledge even in its most elementary phase—the phase of the reception of simple ideas—which is not a capacity of distinction between real and apparent, between true and false? If its beginning is a mode of consciousness, such as mere sensation would be—which, because excluding all reference, excludes that reference of itself to something else without which there could be no consciousness of a distinction between an 'is' and an 'is not,' and therefore no true judgment at all—how can any repetition of such modes give such a judgment?[1]

[1] Cf. the ground of distinction between clearness and obscurity of ideas; (Book II. chap. xxix. sec. 2) 'Our simple ideas are clear when they

It involves a judgment in which mind and thing are distinguished,

24. The fact is that the 'simple idea' with Locke, as the beginning of knowledge is already, at its minimum, the judgment, 'I have an idea different from other ideas, which I did not make for myself.' His confusion of this judgment with sensation is merely the fundamental confusion, on which all empirical psychology rests, between two essentially distinct questions—one metaphysical, What is the simplest element of knowledge? the other physiological, What are the conditions in the individual human organism in virtue of which it becomes a vehicle of knowledge? Though he failed, however, to distinguish these questions, their difference made itself appear in a certain divergence between the second and fourth books of his Essay. So far we have limited our consideration to passages in the second book, in which he treats *eo nomine* of ideas; of simple ideas as the original of knowledge, of complex ones as formed in its process. Here the physical theory is predominant. The beginning of knowledge is that without which the animal is incapable of it, viz. sensation regarded as an impression through 'animal spirits' on the brain. But it can only be so represented because sensation is identified with that which later psychology distinguished from it as Perception, and for which no physical theory can account. As we have seen, the whole theory of this (the second) book turns upon the supposition that the simple idea of sensation is in every case an idea of a sensible quality, and that it is so, not merely for us, considering it *ex parte post*, but consciously for the individual subject, which can mean nothing else than that it distinguishes itself from, and refers itself to, a thing. Locke himself, indeed, according to his plan of bringing in a 'faculty of the mind' whenever it is convenient, would perhaps rather have said that it is so distinguished and referred 'by the mind.' He considers the simple idea not, as it truly is, the mind itself in a certain relation, but a datum or material of the mind, upon which it performs certain operations as upon something other than itself, though all the while it is constituted, at least in its actuality, by this material. Between the reference of the simple idea to the thing, however, by itself and 'by the mind,'

are such as the objects themselves, whence they are taken, did or might in a well-ordered sensation or perception, present them.' As Locke always assumes that immediate consciousness can tell whether an idea is clear or not, it follows that immediate consciousness must tell of 'the object itself, whence the idea is taken.'

there is no essential difference. In either case the reference is inconsistent with the simplicity of the simple idea; and if the latter expression avoids the seeming awkwardness of ascribing activity to the idea, it yet ascribes it to the mind in that elementary stage in which, according to Locke, it is merely receptive.

And is equivalent to what he afterwards calls 'knowledge of identity.'

25. So much for the theory 'of ideas.' As if, however, in treating of ideas he had been treating of anything else than knowledge, he afterwards considers 'knowledge' in a book by itself (the fourth) under that title, and here the question as to the relation between idea and thing comes before him in a somewhat different shape. According to his well-known definition, knowledge is the perception of the agreement or disagreement of any of our ideas. The agreement or disagreement may be of four sorts. It may be in the way (1) of identity, (2) of relation, (3) of co-existence, (4) of real existence. In his account of the last sort of agreement, it may be remarked by the way, he departs at once and openly from his definition, making it an agreement, not of idea with idea, but of an idea with 'actual real existence.' The fatal but connatural wound in his system, which this inconsistency marks, will appear more fully below. For the present, our concern is for the adjustment of the definition of knowledge to the doctrine of the simple idea as the beginning of knowledge. According to the definition, it cannot be the simple idea, as such, that constitutes this beginning, but only the perception of agreement or disagreement between simple ideas. 'There could be no room,' says Locke distinctly, 'for any positive knowledge at all, if we could not distinguish any relation beween our ideas.' (Book IV. chap. i. sec. 5.) Yet in the very context where he makes this statement, the perception of relation is put as a distinct kind of knowledge apart from others. In his account of the other kinds, however, he is faithful to his definition, and treats each as a perception (i.e. a judgment) of a relation in the way of agreement or disagreement. The primary knowledge is that of identity—the knowledge of an idea as identical with itself. 'A man infallibly knows, as soon as ever he has them in his mind, that the ideas he calls *white* and *round*, are the very ideas they are, and not other ideas which he calls *red* and *square*.' (Book IV. chap. i. sec. 4.) Now, as Hume afterwards pointed out, identity is not simple unity. It cannot

be predicated of the 'idea' as merely single, but only as a manifold in singleness. To speak of an idea as the 'same with itself' is unmeaning unless it mean 'same with itself *in its manifold appearances*,' i.e. unless the idea is distinguished, as an object existing continuously, from its present appearance. Thus 'the infallible knowledge,' which Locke describes in the above passage, consists in this, that on the occurrence of a certain 'idea' the man *recognises* it as one, which at other times of its occurrence he has called '*white*.' Such a 'synthesis of recognition,' however, expressed by the application of a common term, implies the reference of a present sensation to a permanent object of thought, in this case the object thought under the term 'white,' so that the sensation becomes an idea of that object. Were there no such objects, there would be no significant names, but only noises; and were the present sensation not so referred, it would not be named. It may be said indeed that the 'permanent object of thought' is merely the instinctive result of a series of past resembling sensations, and that the common name is merely the register of this result. But the question is thus merely thrown further back. Unless the single fleeting sensation was, to begin with, fixed and defined by relation to and distinction from something permanent—in other words, unless it ceased to be a mere sensation—how did it happen that other sensations were referred to it, as different cases of an identical phenomenon, to which the noise suggested by it might be applied as a sign?

Only as such can it be named.

26. This primary distinction and relation of the simple idea Locke implicitly acknowledges when he substitutes for the simple idea, as in the passage last quoted, the man's knowledge that he has the idea; for such knowledge implies the distinction of the idea from its permanent conscious subject, and its determination by that negative relation.[1] Thus determined, it becomes itself a permanent object, or (which comes to the same) an idea *of an object;* a phrase which Locke at his convenience substitutes for the mere idea, whenever it is wanted for making his theory of knowledge square with knowledge itself. Once become such an object, it is a

The same implied in calling it an idea of an object,

[1] Cf. the passage in Book II. chap. vii. sec. 7. 'When ideas are in our minds, we consider them as being actually there.' The mere 'idea' is in fact essentially different from the 'consideration of it as actually there,' as sensation is different from thought. The 'consideration, &c.,' really means the thought of the 'idea' (sensation) as determined by relation to the conscious subject.

basis to which other sensations, like and unlike, may be referred as differentiating attributes. Its identity becomes a definite identity.

made *for*, not *by*, us, and therefore according to Locke really existent.

27. Upon analysis, then, of Locke's account of the most elementary knowledge, the perception of identity or agreement of an idea with itself, we find that like the 'simple idea,' which he elsewhere makes the beginning of knowledge, it really means the reference of a sensation to a conception of a permanent object or subject,[1] either in such a judgment as 'this is white' (sc. a white thing), or in the more elementary one, 'this is an object to me.' In the latter form the judgment represents what Locke puts as the consciousness, 'I have an idea,' or as the 'consideration that the idea is actually there;' in the former it represents what he calls 'the knowledge that the idea which I have in my mind and which I call white is the very idea it is, and not the idea which I call red.' It is only because *referred*, as above, that the sensation is in Locke's phraseology 'a testimony' or 'report' of something. As we said above, his notion of the beginning of knowledge is expressed not merely in the formula 'I have an idea different from other ideas,' but with the addition, 'which I did not make for myself.'[2] The simple idea is supposed to testify to something without that caused it, and it is this interpretation of it which makes it with him the ultimate criterion of reality. But unless it were at once distinguished from and referred to both a thing of which it is an effect and a subject of which it is an experience, it could uot in the first place testify to anything, nor secondly to a thing as made for, not by, the subject. This brings us, however, upon Locke's whole theory of 'real existence,' which requires fuller consideration.

What did he mean by this?

28. It is a theory, we must premise, which is nowhere explicitly stated. It has to be gathered chiefly from those passages of the second book in which he treats of 'complex' or 'artificial' ideas in distinction from simple ones, which are necessarily real, and from the discussion in the fourth book of the 'extent' and 'reality' of knowledge. We have, however, to begin with, in the enumeration of simple ideas, a

[1] For a recognition by Locke of the correlativity of these (of which more will have to be said below) cf. Book II. chap. xxiii. sec. 15. 'Whilst I know by seeing or hearing, &c., that there is some corporeal being without me, the object of that sensation, I do more certainly know that there is some spiritual being within me that sees and hears.'

[2] Cf. Book II. chap. xii. sec. 1.

mention of 'existence,' as one of those 'received alike through all the ways of sensation and reflection.' It is an idea 'suggested to the understanding by every object without and every idea within. When ideas are in our minds, we consider them as being actually there, as well as we consider things to be actually without us; which is, that they exist, or have existence.' (Book II. chap. vii. sec. 7.)

29. The two considerations here mentioned, of 'ideas as actually in our minds,' of 'things as actually without us,' are meant severally to represent the two ways of reflection and sensation, by which the idea of existence is supposed to be suggested. But sensation, according to Locke, is an organ of 'ideas,' just as much as reflection. Taking his doctrine strictly, there are no 'objects' but 'ideas' to suggest the idea of existence, whether by the way of sensation or by that of reflection, and no ideas that are not 'in the mind.' (Book II. chap. ix. sec. 3, &c.)

Existence as the mere presence of a feeling.

30. The designation of the idea of existence, then, as 'suggested by every idea within,' covers every possible suggestion. It can mean nothing else than that it is given in every act and mode of consciousness; that it is inseparable from feeling as such, being itself at the same time a distinct simple idea. This, we may remark by the way, involves the conclusion that every idea is composite, made up of whatever distinguishes it from other ideas together with the idea of existence. Of this idea of existence itself, however, it will be impossible to say anything distinctive; for, as it accompanies all possible objects of consciousness, there will be no cases where it is absent to be distinguished from those where it is present. Not merely will it be undefinable, as every simple idea is; it will be impossible 'to send a man to his senses' (according to Locke's favourite subterfuge) in order to know what it is, since it is neither given in one sense as distinct from another, nor in all senses as distinct from any other modification of consciousness. Thus regarded, to treat it as a simple idea alongside of other simple ideas is a palpable contradiction. It is the mere 'It is felt,' the abstraction of consciousness, no more to be reckoned as one among other ideas than colour in general is to be co-ordinated with red, white, and blue. Whether I smell a rose in the summer or recall the smell in winter; whether I see a horse or a ghost, or imagine a centaur or think of gravitation or the

philosopher's stone—in every case alike the idea or 'immediate object of the mind' *exists*. Yet we find Locke distinguishing between real ideas, as those that 'have a conformity with the existence of things,' and fantastic ideas, as those which have no such conformity (Book II. chap. xxx. sec. 1); and again in the fourth book (chap. i. sec. 7, chap. iii. sec. 21, &c.) he makes the perception of the agreement of an idea with existence a special kind of knowledge, different from that of agreement of idea with idea; and having done so, raises the question whether we have such a knowledge of existence at all, and decides that our knowledge of it is very narrow.

Existence as reality.

31. How are such a distinction and such a question to be reconciled with the attribution of existence to every idea? The answer of course will be, that when he speaks of ideas as not conforming to existence, and makes knowledge or the agreement of ideas with each other something different from their agreement with existence, he means and generally says 'real actual existence,' or the 'existence of *things*,' i.e. an existence, whatever it be, which is opposed to mere existence in consciousness. Doubtless he so means, but this implies that upon mere consciousness, or the simple presence of ideas, there has supervened a distinction, which has to be accounted for, of ideas from things which they represent on the one hand, and from a mind of which they are affections on the other. Even in the passage first quoted (Book II. chap. vii. sec. 7), where existence is ascribed to every idea, on looking closely we find this distinction obtruding itself, though without explicit acknowledgment. In the very same breath, so to speak, in which the idea of existence is said to be suggested by every idea, it is further described as being either of two considerations—either the consideration of an idea as actually in our mind, or of a thing as actually without us. Such considerations at once imply the supervention of that distinction between 'mind' and 'thing,' which gives a wholly new meaning to 'existence.' They are not, in truth, as Locke supposed, two separate considerations, one or other of which, as the case may be, is interchangeable with the 'idea of existence.' One is correlative with the other, and neither is the same as simple feeling. Considered as actually in the mind, the feeling is distinguished from the mind as an affection from the subject thereof, and just in virtue of this

distinction is referred to a thing as the cause of the affection, or becomes representative of a thing, But for such consideration there would for us, if the doctrine of ideas means anything, be no 'thing without us' at all. To 'consider things as actually without us' is to consider them as causes of the ideas in our mind, and this is to have an idea of existence quite different from mere consciousness. It is to have an idea of it which at once suggests the question whether the existence is real or apparent; in other words, whether the thing, to which an affection of the mind is referred as its cause, is really its cause or no.

By confusion of these two meanings, reality and its conditions are represented as given in simple feeling,

32. Between these two meanings of existence—its meaning as interchangeable with simple consciousness, and its meaning as reality—Locke failed to distinguish. Just as, having announced 'ideas' to be the sole 'materials of knowledge,' he allows himself at his convenience to put 'things' in the place of ideas; so having identified existence with momentary consciouness or the simple idea, he substitutes for existence in this sense *reality*, and in consequence finds reality given solely in the simple idea. Thus when the conceptions of cause or substance, or relations of any kind, come under view, since these cannot be represented as given in momentary consciousness, they have to be pronounced not to exist, and since existence is reality, to be unreal or 'fictions of the mind.' But without these unreal relations there could be no knowledge, and if they are not given in the elements of knowledge, it is difficult to see how they are introduced, or to avoid the appearance of constructing knowledge out of the unknown. Given in the elements of knowledge, however, they cannot be, if these are simple ideas or momentary recurrences of the 'it is felt.' But by help of Locke's equivocation between the two meanings of existence, they can be covertly introduced as the real. Existence is given in the simple idea, existence equals the real, therefore the real is given in the simple idea. But think or speak of the real as we will, we find that it exhibits itself as substance, as cause, and as related; i.e. according to Locke as a 'complex' or 'invented' or 'superinduced' idea.

Yet reality involves complex ideas which are

33. In the second book of his Essay, which treats of ideas, he makes the grand distinction between 'the simple ideas which are all from things themselves, and of which the mind can have no more or other than what are suggested to it,' and

made by the mind.

the 'complex ideas which are the workmanship of the mind.' (Book II. chap. xii.) In his account of the latter there are some curious cross-divisions, but he finally enumerates them as ideas either of *modes*, *substances*, or *relations*. The character of these ideas he then proceeds to explain in the order given, one after the other, and as if each were independent of the rest; though according to his own statement the idea of mode presupposes that of substance, and the idea of substance involves that of relation. 'Modes I call such complex ideas, which, however compounded, contain not in them the supposition of subsisting by themselves, but are considered as dependencies on, or affections of, substances; such are the ideas signified by the words 'triangle,' 'gratitude,' 'murder,' &c. Of these there are two sorts. First, there are some which are only variations or different combinations of the same simple idea without the mixture of any other—as a dozen, or score—which are nothing but the ideas of so many distinct units added together; and these I call simple modes, as being contained within the bounds of one simple idea. Secondly, there are others compounded of simple ideas of several kinds, put together to make one complex one; e. g. beauty, ... and these I call *mixed modes*.' (Book II. chap. xii. secs. 4, 5.) So soon as he comes to speak more in detail of simple modes, he falls into apparent contradiction with his doctrine that, as complex ideas, they are the mere workmanship of the mind. All particular sounds and colours are simple modes of the simple ideas of sound and colour. (Book II. chap. xviii. secs. 3, 4.) Again, the ideas of figure, place, distance, as of all particular figures, places, and distances, are simple modes of the simple idea of space. (Book II. chap. xiii.) To maintain, however, that the ideas of space, sound, or colour *in general* (as simple ideas) were taken from things themselves, while those of *particular* spaces, sounds, and colours (as complex ideas) were 'made by the mind,' was for Locke impossible. Thus in the very next chapter after that in which he has opposed all complex ideas, those of simple modes included, as made by the mind to all simple ones as taken from things themselves, he speaks of simple modes 'either *as found in things existing*, or as made by the mind within itself.' (Book II. chap. xiii. sec. 1.) It was not for Locke to get over this confusion by denying the antithesis between that which the

mind 'makes' and that which it 'takes from existing things,' and for the present we must leave it as it stands. We must further note that a mode being considered 'as an affection of a substance,' space must be to the particular spaces which are its simple modes, as a substance to its modifications. So too colour to particular colours, &c., &c. But the idea of a substance is a complex idea 'framed by the mind.' Therefore the idea of space—at any rate such an idea as we have of it when we think of distances, places, or figures, and when else do we think of it at all?—must be a complex and artificial idea. But according to Locke the idea of space is emphatically a simple idea, given immediately *both* by sight and touch, concerning which if a man enquire, he 'sends him to his senses.' (Book II. chap. v.)

Such are substance and relation which must be found in every object of knowledge.

34. These contradictions are not avoidable blunders, due to carelessness or want of a clear head in the individual writer. 'The complex idea of substance' will not be exorcised; the mind will show its workmanship in the very elements of knowledge towards which its relation seems most passive—in the 'existing things' which are the conditions of its experience no less than in the individual's conscious reaction upon them. The interrogator of the individual consciousness seeks to know that consciousness, and just for that reason must find in it at every stage those formal conceptions, such as substance and cause, without which there can be no object of knowledge at all. He thus substantiates sensation, while he thinks that he merely observes it, and calls it a sensible thing. Sensations, thus unconsciously transformed, are for him the real, the actually existent. Whatever is not given by immediate sense, outer or inner, he reckons a mere 'thing of the mind.' The ideas of substance and relation, then, not being given by sense, must in his eyes be things of the mind, in distinction from really existent things. But speech bewrayeth him. He cannot state anything that he knows save in terms which imply that substance and relation are in the things known; and hence an inevitable obtrusion of 'things of the mind' in the place of real existence, just where the opposition between them is being insisted on. Again, as a man seems to observe consciousness in himself and others, it has nothing that it has not received. It is a blank to begin with, but passive of that which is without, and through its passivity it becomes

informed. If the 'mind,' then, means this or that individual consciousness, the things of the mind must be gradually developed from an original passivity. On the other hand, let anyone try to know this original passive consciousness, and in it, as in every other known object-matter, he must find these things of the mind, substance and relations. If nature is the object, he must find them in nature; if his own self-consciousness, he must find them in that consciousness. But while nature knows not what is in herself, self-consciousness, it would seem, *ex vi termini*, does know. Therefore not merely substance and relation must be found in the original consciousness, but the knowledge, the ideas, of them.

Abstract idea of substance and complex ideas of particular sorts of substance.

35. As we follow Locke's treatment of these ideas more in detail, we shall find the logical see-saw, here accounted for, appearing with scarcely a disguise. His account of the origin of the 'complex ideas of substances' is as follows. 'The mind being furnished with a great number of the simple ideas, conveyed in by the senses, as they are found in exterior things, or by reflection on its own operations, takes notice also that a certain number of these simple ideas go constantly together; which being presumed to belong to one thing, and words being suited to common apprehensions and made use of for quick despatch, are called, so united in one subject, by one name; which by inadvertency we are apt afterwards to talk of and consider as one simple idea, which indeed is a complication of many ideas together; because, as I have said, not imagining how these simple ideas can subsist by themselves, we accustom ourselves to suppose some *substratum*, wherein they do subsist, and from which they do result; which therefore we call *substance*.' (Book II. chap. xxiii. sec. 1.) In the controversy with Stillingfleet, which arose out of this chapter, Locke was constrained further to distinguish (as he certainly did not do in the original text) between the 'ideas of distinct substances, such as man, horse,' and the 'general idea of substance.' It is to ideas of the former sort that he must be taken to refer in the above passage, when he speaks of them as formed by 'complication of many ideas together,' and these alone are *complex* in the strict sense. The *general* idea of substance on the other hand, which like all general ideas (according to Locke) is made by abstraction, means the idea of a 'substratum which we accustom ourselves to suppose' as that wherein

the complicated ideas 'do subsist, and from which they do result.' This, however, he regards as itself one, 'the first and chief,' among the ideas which make up any of the 'distinct substances.' (Book II. chap. xii. sec. 6.) Nor is he faithful to the distinction between the general and the complex. In one passage of the first letter to Stillingfleet, he distinctly speaks of the *general* idea of substance as a '*complex* idea made up of the idea of something plus that of relation to qualities.'[1] Notwithstanding this confusion of terms, however, he no doubt had before him what seemed a clear distinction between the 'abstract general idea' of substance, as such, i.e. of 'something related as a support to accidents,' but which does not include ideas of any particular accidents, and the composite idea of a substance, made up of a multitude of simple ideas plus that of the something related to them as a support. We shall find each of these ideas, according to Locke's statement, presupposing the other.

The abstract idea according to Locke at once precedes and follows the complex.

36. In the passage above quoted, our aptness to consider a complication of simple ideas, which we notice to go constantly together, as one simple idea, is accounted for as the result of a presumption that they belong to one thing. This presumption is again described in the words that 'we accustom ourselves to suppose some substratum, wherein they do subsist, and from which they do result; which therefore we call substance.' Here it is implied that the idea of substance, i. e. 'the general idea of something related as a support to accidents,' is one gradually formed upon observation of the regular coincidence of certain simple ideas. In the sequel (sec. 3 of the same chapter[2]) we are told that such an idea—'an obscure and relative idea of substance in general—being thus made, we come to have the ideas of particular sorts of substances by collecting such combinations of simple ideas as are, by experience and observation of men's senses, taken notice of to exist together.' Thus a *general* idea of

[1] Upon a reference to the chapter on 'complex ideas' (Book II. chap. xii.), it will appear that the term is used in a stricter and a looser sense. In the looser sense it is not confined to *compound* ideas, but in opposition to simple ones includes those of relation and even 'abstract general ideas.' When Locke thinks of the *general* idea of substance apart from the complication of accidents referred to it, he opposes it to the complex idea, according to the stricter sense of that term. On the other hand, when he thinks of it as 'made up' of the idea of *something* plus that of relation to qualities (as if there could be an idea of something apart from such relation), it seems to him to have two elements, and therefore to be complex.

[2] I. xxiii.

substance having been formed by one gradual process, ideas of particular sorts of substances are formed by another and later one. But then the very same 'collection of such combinations of simple ideas as are taken notice of to exist together,' which (according to sec. 3) constitutes the later process and follows upon the formation of the *general* idea of substance, has been previously described as preceding and conditioning that formation. It is the complication of simple ideas, noticed to go constantly together, that (according to sec. 1) leads to the 'idea of substance in general.' To this see-saw between the process preceding and that following the formation of the idea in question must be added the difficulty, that Locke's account makes the general idea precede the particular, which is against the whole tenor of his doctrine of abstraction as an operation whereby 'the mind makes the particular ideas, received from particular objects, to become general.' (Book II. chap. xi. sec. 9.)

Reference of ideas to nature or God, the same as reference to substance.

37. It may be said perhaps that Locke's self-contradiction in this regard is more apparent than real; that the two processes of combining simple ideas are essentially different, just because in the later process they are combined by a conscious act of the mind as accidents of a 'something,' of which the *general* idea has been previously formed, whereas in the earlier one they are merely presented together 'by nature,' and, *ex hypothesi*, though they gradually suggest, do not carry with them any reference to a 'substratum.' But upon this we must remark that the presentation of ideas 'by nature' or 'by God,' though a mode of speech of which Locke in his account of the origin of knowledge freely avails himself, means nothing else than their relation to a 'substratum,' if not 'wherein they do subsist,' yet 'from which they do result.' If then it is for consciousness that ideas are presented together by nature, they already carry with them that reference to a substratum which is supposed gradually to result from their concurrence. If it is not for consciousness that they are so presented, if they do not *severally* carry with them a reference to 'something,' how is it they come to do so in the gross? If a single sensation of heat is not referred to a hot thing, why should it be so referred on the thousandth recurrence? Because perhaps, recurring constantly in the same relations, it compels the inference of permanent antecedents? But the 'same relations' mean

relations to the same things, and the observation of these relations presupposes just that conception of *the thing* which it is sought to account for.

But it is explicitly to substance that Locke makes them refer themselves.

38. We are estopped, however, from any such explanation of Locke as would suggest these ulterior questions by his explicit statement that 'all simple ideas, all sensible qualities, carry with them a supposition of a substratum to exist in, and of a substance wherein they inhere.' The vindication of himself against the pathetic complaint of Stillingfleet, that he had 'almost discarded substance out of the reasonable part of the world,' in which this statement occurs, was certainly not needed. Already in the original text the simple ideas, of which the association suggests the idea of substance, are such as 'the mind finds in exterior things or by reflection on its own operations.' But to find them in an exterior thing is to find them in a substance, a 'something it knows not what,' regarded as outward, just as to find them by reflection on its own operations, as its own, is to find them in such a substance regarded as inward. The process then by which, according to Locke, the general idea of substance is arrived at, presupposes this idea just as much as the process, by which ideas of particular sorts of substances are got, presupposes it, and the distinction between the two processes, as he puts it, disappears.

In the process by which we are supposed to arrive at complex ideas of substances the beginning is the same as the end.

39. The same paralogism appears under a slightly altered form when it is stated (in the first letter to Stillingfleet) that the idea of substance as the 'general indetermined idea of *something* is by the abstraction of the mind derived from the simple ideas of sensation and reflection.' Now 'abstraction' with Locke means the 'separation of an idea from all other ideas that accompany it in its real existence.' (Book II. chap. xii. sec. 1.) It is clear then that it is impossible to abstract an idea which is not *there*, in real existence, to be abstracted. Accordingly, if the 'general idea of something' is derived by abstraction from simple ideas of sensation and reflection, it must be originally given with these ideas, or it would not afterwards be separated from them. Conversely they must carry this idea with them, and cannot be simple ideas at all, but compound ones, each made up of 'the general idea of something or being,' and of an accident which this something supports. How then does the general idea of substance or 'something,' *as derived*, differ from the

idea of 'something,' as given in the original ideas of sensation and reflection from which the supposed process of abstraction starts? What can be said of the one that cannot be said of the other? If the derived general idea is of something related to qualities, what, according to Locke, are the original ideas but those of qualities related to something? It is true that the general idea is of something, of which nothing further is known, related to qualities in general, not to any particular qualities. But the 'simple idea' in like manner can only be of an indeterminate quality, for in order to any determination of it, the idea must be put together with another idea, and so cease to be simple; and the 'something,' to which it is referred, must for the same reason be a purely indeterminate something. If, in order to avoid concluding that Locke thus unwittingly identified the abstract general idea of substance with any simple idea, we say that the simple idea, because not abstract, is not indeterminate but of a real quality, defined by manifold relations, we fall upon the new difficulty that, if so, not only does the simple idea become manifoldly complex, but just such an 'idea of a particular sort of substance' as, according to Locke, is derived from the derived idea of substance in general. As an idea of a quality, it is also necessarily an idea of a correlative 'something;' and if it is an idea of a quality in its reality, i. e. as determined by various relations, it must be an idea of a variously qualified something, i. e. of a particular substance. Then not merely the middle of the twofold process by which we are supposed to get at 'complex ideas of substances'— i. e. the *abstract* something; but its end—i. e. the *particular* something—turns out to be the same as its beginning.

Doctrine of abstraction inconsistent with doctrine of complex ideas.

40. The fact is, that in making the general idea of substance precede particular ideas of sorts of substances (as he certainly however confusedly does, in the 23rd chapter of the Second Book,[1] as well as by implication in his doctrine of modes, Book II. chap. xii. sec. 4), Locke stumbled upon a truth which he was not aware of, and which will not fit into his ordinary doctrine of general ideas: the truth that knowledge is a process from the more abstract to the more concrete, not the reverse, as is commonly supposed, and as

[1] See above, paragraph 35.

Locke's definition of abstraction implies. Throughout his prolix discussion of 'substance' and 'essence' we find two opposite notions perpetually cross each other: one that knowledge begins with the simple idea, the other that it begins with the real thing as particularized by manifold relations. According to the former notion, simple ideas being given, void of relation, as the real, the mind of its own act proceeds to bring them into relation and compound them: according to the latter, a thing of various properties (i.e. relations[1]) being given as the real, the mind proceeds to separate these from each other. According to the one notion the intellectual process, as one of complication, ends just where, according to the other notion, as one of abstraction, it began.

The confusion covered by use of 'particulars.'

41. The chief verbal equivocation, under which Locke disguises the confusion of these two notions, is to be found in the use of the word 'particular,' which is sometimes used for the mere individual having no community with anything else, sometimes for the thing qualified by relation to a multitude of other things. The simple idea or sensation; the 'something' which the simple idea is supposed to 'report,' and which Locke at his pleasure identifies with it; the complex idea; and the thing as the collection of the properties which the simple idea 'reports,' all are merged by Locke under the one term 'particulars.' As the only consistency in his use of the term seems to lie in its opposition to 'generals,' we naturally turn to the passage where this opposition is spoken of most at large.

Locke's account of abstract general ideas.

42. 'General and universal belong not to the real existence of things, but are the inventions and creatures of the understanding, made by it for its own use, and concern only signs, whether words or ideas. Words are general when used for signs of general ideas, and so are applicable indifferently to many particular things; and ideas are general, when they are set up as the representatives of many particular things; but universality belongs not to things themselves, which are all of them particular in their existence, even those words and ideas which in their signification are general. When

[1] Cf. Book ii. chap. xxiii. sec. 37. 'Most of the simple ideas that make up our complex ideas of substances are only powers . . . e.g. the greater part of the ideas which make up our complex idea of gold . . . are nothing else *but so many relations* to other substances.'

therefore we quit particulars, the generals that rest are only creatures of our own making, their general nature being nothing but the capacity they are put into by the understanding, of signifying or representing many particulars. For the signification they have is nothing but a relation that by the mind of man is added to them. . . . The sorting of things under names is the workmanship of the understanding, taking occasion from the similitude it observes among them to make abstract general ideas, and set them up in the mind, with names annexed to them, as patterns or forms (for in that sense the word form has a very proper signification), to which as particular things are found to agree, so they come to be of that species, have that denomination, or are put into that classis. For when we say this is a man, that a horse; this justice, that cruelty, what do we else but rank things under different specific names as, agreeing to those abstract ideas, of which we have made those names the signs? And what are the essences of those species, set out and marked by names, but those abstract ideas in the mind; which are, as it were, the bonds between particular things that exist, and the names they are to be ranked under?' (Book III. chap. iii. secs. 11 and 13.)

'Things not general.

43. In the first of these remarkable passages we begin with the familiar opposition between ideas as 'the creatures of the mind' and real things. Ideas, and the words which express them, may be general, but things cannot. 'They are all of them particular in their existence.' Then the ideas and words themselves appear as things, and as such 'in their existence' can only be particular. It is only in its signification, i.e. in its relation to other ideas which it represents, that an idea, particular itself, becomes general, and this relation does not belong to the 'existence' of the idea or to the idea in itself, but 'by the mind of man is added to it.' The relation being thus a fictitious addition to reality, 'general and universal are mere inventions and creatures of the understanding.' The next passage, in spite of the warning that all ideas are particular in their existence, still speaks of general ideas, but only as 'set up in the mind.' To these 'particular things existing are found to agree,' and the agreement is expressed in such judgments as 'this is a man, that a horse; this is justice, that cruelty;' the 'this' and 'that' representing 'particular existing

things,' 'horse' and 'cruelty' abstract general ideas to which these are found to agree.

Generality an invention of the mind.

44. One antithesis is certainly maintained throughout these passages—that between 'real existence which is always particular, and the workmanship of the mind,' which 'invents' generality. Real existence, however, is ascribed (*a*) to things themselves, (*b*) to words and ideas, even those which become of general signification, (*c*) to mixed modes, for in the proposition 'this is justice,' the 'this' must represent a mixed mode. (Cf. II. xii. 5.) The characteristic of the 'really existent,' which distinguishes it from the workmanship of the mind, would seem to be mere individuality, exclusive of all relation. The simple 'this' and 'that,' apart from the relation expressed in the judgment, being mere individuals, are really existent; and conversely, ideas, which in themselves have real existence, when a relation, in virtue of which they become significant, has been 'added to them by the mind,' become 'inventions of the understanding.' This consists with the express statement in the chapter on 'relation' (II. xxv. 8), that it is 'not contained in the existence of things, but is something extraneous and superinduced.' Thus generality, as a relation between any one of a multitude of *single* (not necessarily *simple*) ideas, e.g. single ideas of horses, and all the rest—a relation which belongs not to any one of them singly—is superinduced by the understanding upon their *real*, i.e. their *single* existence. Apart from this relation, it would seem, or in their mere singleness, even ideas of mixed modes, e.g. *this act* of justice, may have real existence.

The result is, that the feeling of each moment is alone real.

45. The result of Locke's statement, thus examined, clearly is that real existence belongs to the present momentary act of consciousness, and to that alone. Ascribed as it is to the 'thing itself,' to the idea which, *as general*, has it not, and to the mixed mode, it is in each case the momentary presence to consciousness that constitutes it. To a thing itself, as distinct from the presentation to consciousness, it cannot belong, for such a 'thing' means that which remains identical with itself under manifold appearances, and both identity and appearance imply relation, i.e. 'an invention of the mind.' As little can it belong to the *content* of any idea, since this is in all cases constituted by relation to other ideas. Thus if I judge 'this is sweet,' the real existence lies

in the simple 'this,' in the mere form of presentation at an individual *now*, not in the relation of this to other flavours which constitutes the determinate sweetness, or to a sweetness at other times tasted. If I judge 'this is a horse,' a present vision really exists, but not so its relation to other sensations of sight or touch, closely precedent or sequent, which make up the 'total impression;' much less its relation to other like impressions thought of, in consideration of which a common name is applied to it. If, again, I judge 'this is an act of justice,' the present thought of the act, as present, really exists; not so those relations of the act which either make it just, or make me apply the name to it. It is true that according to this doctrine the 'really existent' is the unmeaning, and that any statement about it is impossible. We cannot judge of it without bringing it into relation, in which it ceases to be what in its mere singleness it is, and thus loses its reality, overlaid by the 'invention of the understanding.' Nay, if we say that it is the mere 'this' or 'that,' as such—the simple 'here' and 'now'—the very 'this,' in being mentioned or judged of, becomes related to other things which we have called 'this,' and the 'now' to other 'nows.' Thus each acquires a generality, and with it becomes fictitious. As Plato long ago taught—though the lesson seems to require to be taught anew to each generation of philosophers—a consistent sensationalism must be speechless. Locke, himself, in one of the passages quoted, implicity admits this by indicating that only through relations or in their generality are ideas 'significant.'

How Locke avoids this result.

46. He was not the man, however, to become speechless out of sheer consistency. He has a redundancy of terms and tropes for disguising from himself and his reader the real import of his doctrine. In the latter part of the passage quoted we find that the relation or community between ideas, which the understanding invents, is occasioned by a 'similitude which it observes among things.' The general idea having been thus invented, 'things are found to agree with it'—as is natural since they suggested it. Hereupon we are forced to ask how, if all relation is superinduced upon real existence by the understanding, an *observed* relation of similitude among things can occasion the superinduction; and again how it happens, if all generality of ideas is a fiction of the mind, that 'things are found to agree with

general ideas.' How can the real existence called 'this' or 'that,' which only really exists so far as nothing can be said of it but that it is 'this' or 'that,' agree with anything whatever? Agreement implies some content, some determination by properties, i.e. by relations, in the things agreeing, whereas the really existent excludes relation. How then can it agree with the abstract general idea, the import of which, according to Locke's own showing, depends solely on relation?

The 'particular' was to him the individual qualified by general relations.

47. Such questions did not occur to Locke, because while asserting the mere individuality of things existent, and the simplicity of all ideas as *given*, i.e. as real, he never fully recognised the meaning of his own assertion. Under the shelter of the ambiguous 'particular' he could at any time substitute for the *mere* individual the *determinate* individual, or individual qualified by community with other things; just as, again, under covering of the 'simple idea' he could substitute for the mere momentary consciousness the perception of a definite thing. Thus when he speaks of the judgment 'this is gold' as expressing the agreement of a real (i.e. individual) thing with a general idea, he thinks of 'this' as already having, apart from the judgment, the determination which it first receives in the judgment. He thinks of it, in other words, not as the mere 'perishing' sensation[1] or individual void of relation, but as a sensation symbolical of other possibilities of sensation which, as so many relations of a *thing* to us or to other things, are connoted by the common noun 'gold.' It thus 'agrees' with the abstract idea or conception of qualities, i.e. because it is already the 'creature of the understanding,' determined by relations which constitute a generality and community between it and other things. Such a notion of the really existent thing—wholly inconsistent with his doctrine of relation and of the general—Locke has before him when he speaks of general ideas as formed by abstraction of certain qualities from real things, or of certain ideas from other ideas that accompany them in real existence. 'When some one first lit on a parcel of that sort of substance we denote by the word *gold*, . . . its peculiar colour, perhaps, and weight were the first he abstracted from it, to make the complex idea of that species . . . another perhaps added to these the ideas of fusibility

[1] 'All impressions are perishing existences.'—HUME. See below, paragraph 208.

and fixedness . . . another its ductility and solubility in aqua regia. These, or part of these, put together, usually make the complex idea in men's minds of that sort of body we call *gold*.' (Book II. chap. xxxi. sec. 9.) Here the supposition is that a thing, multitudinously qualified, is given apart from any action of the understanding, which then proceeds to act in the way of successively detaching ('abstracting') these qualities and recombining them as the idea of a species. Such a recombination, indeed, would seem but wasted labour. The qualities are assumed to be already found by the understanding and found as in a thing; otherwise the understanding could not abstract them from it. Why should it then painfully put together in imperfect combination what has been previously given to it complete? Of the complex idea which results from the work of abstraction, nothing can be said but a small part of what is predicable of the known thing which the possibility of such abstraction presupposes.

This is the real thing from which abstraction is supposed to start.

48. 'The complex idea of a species,' spoken of in the passage last quoted, corresponds to what, in Locke's theory of substance, is called the 'idea of a particular sort of substance.' In considering that theory we saw that, according to his account, the beginning of the process by which the 'abstract idea of substance' was formed, was either that abstract idea itself, the mere 'something,' or by a double contradiction the 'complex idea of a particular sort of substance' which yet we only come to have *after* the abstract idea has been formed. In the passage now before us there is no direct mention of the abstraction of the 'substratum,' as such, but only of the quality, and hence there is no ambiguity about the paralogism. It is not a mere 'something' that the man 'lights upon,' and thus it is not this that holds the place at once of the given and the derived, but a something having manifold qualities to be abstracted. In other words, it is the 'idea of a particular sort of substance' that he starts from, and it is just this again to which, as a 'complex idea of a species,' his understanding is supposed gradually to lead him. The understanding, indeed, according to Locke, is never adequate to nature, and accordingly the qualities abstracted and recombined in the complex idea always fall vastly short of the fulness of those

given in the real thing; or as he states it in terms of the multiplication table (Book II. chap. xxxi. sec. 10), 'some who have examined this species more accurately could, I believe, enumerate ten times as many properties in gold, all of them as inseparable from its internal constitution, as its colour or weight; and it is probable if any one knew all the properties that are by divers men known of this metal, there would an hundred times as many ideas go to the complex idea of gold, as any one man has yet in his; and yet perhaps that would not be the thousandth part of what is to be discovered in it.' These two million properties, and upwards, which await abstraction in gold, are all, it must be noted, according to Locke's statement elsewhere (Book II. chap xxiii. sec. 37), 'nothing but so many relations to other substances.' It is just on account of these multitudinous relations of the real thing that the understanding is inadequate to its comprehension. Yet according to Locke's doctrine of relation these must all be themselves 'superinductions of the mind,' and the greater the fulness which they constitute, the further is the distance from the *mere* individuality which elsewhere, in contrast with the fictitiousness of 'generals,' appears as the equivalent of real existence.

Yet, according to the doctrine of relation, a creation of thought.

49. The real thing and the creation of the understanding thus change places. That which is given to the understanding as the real, which it finds and does not make, is not now the bare atom upon which relations have to be artificially superinduced. Nor is it the mere present feeling, which has 'by the mind of man' to be made 'significant,' or representative of past experience. It is itself an inexhaustible complex of relations, whether they are considered as subsisting between it and other things, or between the sensations which it is 'fitted to produce in us.' These are the real, which is thus a system, a community; and if the 'general,' as Locke says, is that which 'has the capacity of representing many particulars,' the real thing itself is general, for it represents —nay, is constituted by—the manifold particular feelings which, mediately or immediately, it excites in us. On the other hand, the invention of the understanding, instead of giving 'significance' or content to the mere individuality of the real, as it does according to Locke's theory of 'generals,' now appears as detaching fragments from the fulness of the

real to recombine them in an 'abstract essence' of its own. Instead of adding complexity to the simple, it subtracts from the complex.

Summary of the above contradictions.

50. To gather up, then, the lines of contradiction which traverse Locke's doctrine of real existence as it appears in his account of general and complex ideas:—The idea of substance is an abstract general idea, not given directly in sensation or reflection, but 'invented by the understanding,' as by consequence must be ideas of particular sorts of substances which presuppose the abstract idea. On the other hand, the ideas of sensation and reflection, from which the idea of substance is abstracted, and to which as *real* it as an *invention* is opposed, are ideas of 'something,' and are only real as representative of something. But this idea of something = the idea of substance. Therefore the idea of substance is the presupposition, and the condition of the reality, of the very ideas from which it is said to be derived. Again, if the general idea of substance is got by abstraction, it must be originally given in conjunction with the ideas of sensation or reflection from which it is afterwards abstracted, i.e. separated. But in such conjunction it constitutes the ideas of particular sorts of substances. Therefore these latter ideas, which yet we 'come to have' after the general idea of substance, form the prior experience from which this general idea is abstracted. Further, this original experience, from which abstraction starts, being of 'sorts of substances,' and these sorts being constituted by relations, it follows that relation is given in the original experience. But that which is so given is 'real existence' in opposition to the invention of the understanding. Therefore these relations, and the community which they constitute, really exist. On the other hand, mere individuals alone really exist, while relations between them are superinduced by the mind. Once more, the simple idea given in sensation or reflection, as it is made *for* not *by* us, has or results from real existence, whereas general and complex ideas are the workmanship of the mind. But this workmanship consists in the abstraction of ideas from each other, and from that to which they are related as qualities. It thus presupposes at once the general idea of 'something' or substance, and the complex idea of qualities of the something. Therefore it must be general and complex ideas that are real, as made for and

not by us, and that afford the inventive understanding its material. Yet if so—if they are *given*—why make them over again by abstraction and recomplication?

51. We may get over the last difficulty, indeed, by distinguishing between the complex and confused, between abstraction and analysis. We may say that what is originally given in experience is the confused, which to us is simple, or in other words has no definite content, because, till it has been analysed, nothing can be said of it, though in itself it is infinetely complex; that thus the process, which Locke roughly calls abstraction, and which, as he describes it, consists merely in taking grains from the big heap that is given in order to make a little heap of one's own, is yet, rightly understood, the true process of knowledge—a process which may be said at once to begin with the complex and to end with it, to take from the concrete and to constitute it, because it begins with that which is in itself the fulness of reality, but which only becomes so for us as it is gradually spelt out by our analysis. To put the case thus, however, is not to correct Locke's statement, but wholly to change his doctrine. It renders futile his easy method of 'sending a man to his senses' for the discovery of reality, and destroys the supposition that the elements of knowledge can be ascertained by the interrogation of the individual consciousness. Such consciousness can tell nothing of its own beginning, if of this beginning, as of the purely indefinite, nothing can be said; if it only becomes defined through relations, which in its state of primitive potentiality are not actually in it. The senses again, so far from being, in that mere passivity which Locke ascribes to them, organs of ready-made reality, can have nothing to tell, if it is only through the active processes of 'discerning, comparing, and compounding,' that they acquire a definite content. But to admit this is nothing else than, in order to avoid a contradiction of which Locke was not aware, to efface just that characteristic of his doctrine which commends it to 'common sense'—the supposition, namely, that the simple datum of sense, as it is for sense or in its mere individuality, is the real, in opposition to the 'invention of the mind.' That this supposition is to make the real the unmeaning, the empty, of which nothing can be said, he did not see because, under an unconscious delusion of words, even while asserting

They cannot be overcome without violence to Locke's fundamental principles.

that the names of simple ideas are undefinable (Book III. chap. iv. sec. 4), which means that nothing can be said of such ideas, and while admitting that the processes of discerning, comparing, and compounding ideas, which mean nothing else than the bringing them into relation[1] or the superinduction upon them of fictions of the mind, are necessary to constitute even the beginnings of knowledge, he yet allows himself to invest the simple idea, as the real, with those definite qualities which can only accrue to it, according to his showing, from the 'inventive' action of the understanding.

As real existence, the simple idea carries with it 'invented' relation of cause.

52. Thus invested, it is already substance or symbolical of substance, not a mere feeling but a felt thing, recognised either under that minimum of qualification which enables us merely to say that it is 'something,' or (in Locke's language) abstract substance, or under the greater complication of qualities which constitutes a 'particular sort of substance'—gold, horse, water, &c. Real existence thus means substance. It is not the simple idea or sensation by itself that is real, but this idea as caused by a thing. It is the thing that is primarily the real; the idea only secondarily so, because it results from a power in the thing. As we have seen, Locke's doctrine of the necessary adequacy, reality, and truth of the simple idea turns upon the supposition that it is, and announces itself as an 'ectype' of an 'archetype.' But there is not a different archetype to each sensation; if there were, in 'reporting' it the sensation would do no more than report itself. It is the supposed single cause of manifold different sensations or simple ideas, to which a single name is applied. 'If sugar produce in us the ideas which we call whiteness and sweetness, we are sure there is a power in sugar to produce those ideas in our minds. . . . . And so each sensation answering the power that operates on any of our senses, the idea so produced is a real idea (and not a fiction of the mind, which has no power to produce any single idea), and

[1] Locke only states this explicitly of comparison, 'an operation of the mind about its ideas, upon which depends all that large tribe of ideas, comprehended under relation.' (Book II. chap. xi. sec. 4.) It is clear, however, that the same remark must apply to the 'discernment of ideas,' which is strictly correlative to comparison, and to their composition, which means that they are brought into relation as constituents of a whole.

That these three processes are necessary to constitute the beginnings of knowledge, according to Locke, appears from Book II. chap. xi. sec. 15, taken in connection with what precedes in that chapter.

cannot but be adequate . . . . and so all simple ideas are adequate.' (Book II. chap. xxxi. sec. 2.) The sugar, which is here the 'archetype' and the source of reality in the idea, is just what Locke elsewhere calls 'a particular sort of substance,' as the 'something' from which a certain set of sensations result, and in which, as sensible qualities, they inhere. Strictly speaking, however, according to Locke, that which inheres in the thing is not the quality, as it is to us, but a power to produce it. (Book II. chap. viii. sec. 23, and c. xxiii. 37.)

Correlativity of cause and substance.

53. In calling a sensation or idea the product of a power, substance is presupposed just as much as in calling it a sensible quality; only that with Locke 'quality' conveyed the notion of inherence in the substance, power that of relation to an effect not *in* the substance itself. 'Secondary qualities are nothing but the powers which *substances* have to produce several ideas in us by our senses, which ideas are not in the things themselves, otherwise than as anything is in its cause.' (Book II. chap. xxiii. sec. 9.) 'Most of the simple ideas, that make up our complex ideas of substances, are only powers . . . . or relations to other substances (or, as he explains elsewhere, 'relations to our perceptions,' [1]), and are not really in the substance considered barely in itself.' (Book II. chap. xxiii. sec. 37, and xxxi. 8.) That this implies the inclusion of the idea of cause in that of substance, appears from Locke's statement that 'whatever is considered by us to operate to the producing any particular simple idea which did not before exist, hath thereby in our minds the relation of a cause.' (Book II. chap. xxvi. sec. 1.) Thus to be conscious of the reality of a simple idea, as that which is not made by the subject of the idea, but results from a power in a thing, is to have the idea of substance as cause. This latter idea must be the condition of the consciousness of reality. If the consciousness of reality is implied in the beginning of knowledge, so must the correlative ideas be of cause and substance.

How do we know that ideas correspond to reality of things?

54. On examining Locke's second rehearsal of his theory in the fourth book of the Essay—that 'On Knowledge'—we are led to this result quite as inevitably as in the book 'On Ideas.' He has a special chapter on the 'reality of human knowledge,' where he puts the problem thus:—'It is

[1] Book II. chap. xxi. sec. 3.

Locke's answer.

evident the mind knows not things immediately, but only by the intervention of the ideas it has of them. Our knowledge therefore is real only so far as there is a conformity between our ideas and the reality of things. But what shall be here the criterion? How shall the mind, when it perceives nothing but its own ideas, know that they agree with things themselves?' (Book IV. chap. iv. sec. 3.) It knows this, he proceeds to show, in the case of simple ideas, because 'since the mind can by no means make them to itself, they must be the product of things operating on the mind in a natural way. . . . . Simple ideas are not fictions of our fancies, but the natural and regular productions of things without us, really operating upon us; and so carry with them all the conformity which is intended, or which our state requires, for they represent to us things under those appearances which they are fitted to produce in us; whereby we are enabled to distinguish the sorts of particular substances,' &c. &c. (Book IV. chap. iv. sec. 4.) The whole force of this passage depends on the notion that simple ideas are already to the subject of them not his own making, but the product of a thing, which in its relation to these ideas is a 'particular sort of substance.' It is the reception of such ideas, so related, that Locke calls 'sensitive knowledge of particular existence,' or a 'perception of the mind, employed about the particular existence of finite beings without us.' (Book iv. chap. ii. sec. 14.) This, however, he distinguishes from two other 'degrees of knowledge or certainty,' 'intuition' and 'demonstration,' of which the former is attained when the agreement or disagreement of two ideas is perceived immediately, the latter when it is perceived mediately through the intervention of certain other agreements or disagreements (less or more), each of which must in turn be perceived immediately. 'Demonstration, being thus really but a series of intuitions, carries the same certainty as intuition, only it is a certainty which it requires more or less pains and attention to apprehend. (Book IV. chap. ii. sec. 4.) Of the 'other perception of the mind, employed about the particular existence of finite beings without us,' which 'passes under the name of knowledge,' he explains that although 'going beyond bare probability, it reaches not perfectly to either of the foregoing degrees of certainty.' 'There can be nothing more certain,' he proceeds, 'than that the idea we receive

from an external object is in our minds; this is intuitive knowledge. But whether there be anything more than barely that idea in our minds, whether we can thence certainly infer the existence of anything without us which corresponds to that idea, is that whereof some men think there may be a question made; because men may have such ideas in their minds, when no such thing exists, no such object affects their senses.' (Book IV. chap. ii. sec. 14.)

It assumes that simple ideas are consciously referred to things that cause them.

55. It is clear that here in his very statement of the question Locke begs the answer. If the intuitive certainty is that 'the idea we *receive from an external object* is in our minds,'[1] how is it possible to doubt whether such an object exists and affects our senses? This impossibility of speaking of the simple idea, except as received from an object, may account for Locke's apparent inconsistency in finding the assurance of the reality of knowledge (under the phrase 'evidence of the senses') just in that 'perception' which reaches not to intuitive or demonstrative certainty, and only 'passes under the name of knowledge.' In the passage just quoted he shows that he is cognizant of the distinction between the simple idea and the perception of an existence corresponding to it, and in consequence distinguishes this perception from proper intuition, but in the very statement of the distinction it eludes him. The simple idea, as he speaks of it, becomes itself, as consciously 'received from an external object,' the perception of existence; just as we have previously seen it become the judgment of identity or perception of the 'agreement of an idea with itself,' which is his first kind of knowledge.

Lively ideas real, because they must be effects of things.

56. In short, with Locke the simple idea, the perception of existence corresponding to the idea, and the judgment of identity, are absolutely merged, and in mutual involution, sometimes under one designation, sometimes under another, are alike presented as the beginning of knowledge. As occasion requires, each does duty for the other. Thus, if the 'reality of knowledge' be in question, the simple idea, which is given, is treated as involving the perception of existence, and the reality is established. If in turn this perception is distinguished from the simple idea, and it is asked whether

[1] I do not now raise the question, What are here the ideas, which must be immediately perceived to agree or disagree in order to make it a case of 'intuitive certainty' or knowledge according to Locke's definition. See below, paragraphs 59, 101, and 147.

the correspondence between idea and existence is properly matter of knowledge, the simple idea has only to be treated as involving the judgment of identity, which again involves that of existence, and the question is answered. So in the context under consideration (Book IV. chap. ii. sec. 14), after raising the question as to the existence of a thing corresponding to the idea, he answers it by the counter question, 'whether anyone is not invincibly conscious to himself of a different perception, when he looks on the sun by day, and thinks on it by night; when he actually tastes wormwood, or smells a rose, or only thinks on that savour or odour? We as plainly find the difference there is between any idea revived in our minds by our own memory, and actually coming into our minds by our senses, as we do between any two distinct ideas.' The force of the above lies in its appeal to the perception of identity, or—to apply the language in which Locke describes this perception—the knowledge that the idea which a man calls the smell of a rose is the very idea it is.[1] The mere difference in liveliness between the present and the recalled idea, which, as Berkeley and Hume rightly maintained, is the only difference between them as mere ideas, cannot by itself constitute the difference between the knowledge of the presence of a thing answering to the idea and the knowledge of its absence. It can only do this if the more lively idea is *identified* with past lively ideas as a representation of one and the same thing which 'agrees with itself' in contrast to the multiplicity of the sensations, its signs. Only in virtue of this identification can either the liveliness of the idea show that the thing—the sun or the rose—is there, or the want of liveliness that it is not, for without it there would be no thing to be there or not to be there. It is because this identification is what Locke understands by the first sort of perception of agreement between ideas, and because he virtually finds this perception again in the simple idea, that the simple idea is to him the index of reality. But if so, the idea in its primitive simplicity is the sign of a thing that is ever the same in the same relations, and we find the 'workmanship of the mind,' its inventions of substance, cause, and relation, in the very rudiments of knowledge.

Present sensation

57. With that curious tendency to reduplication, which is

[1] See above, paragraph 25.

gives knowledge of existence.

one of his characteristics, Locke, after devoting a chapter to the 'reality of human knowledge,' of which the salient passage as to simple ideas has been already quoted, has another upon our 'knowledge of existence.' Here again it is the sensitive knowledge of things actually present to our senses, which with him is merely a synonym for the simple idea, that is the prime criterion. (Book IV. chap. iii. secs. 5 and 2, and chap. ii. sec. 2.) After speaking of the knowledge of our own being and of the existence of a God (about which more will be said below), he proceeds, 'No particular man can know the existence of any other being, but only when, by actually operating upon him, it makes itself perceived by him. For the having the idea of anything in our mind no more proves the existence of that thing, than the picture of a man evidences his being in the world, or the visions of a dream make thereby a true history. It is therefore the actual receiving of ideas from without, that gives us notice of the existence of other things, and makes us know that something doth exist at that time without us, which causes that idea in us, though perhaps we neither know nor consider how it does it; for it takes not from the certainty of our senses and the ideas we receive by them, that we know not the manner wherein they are produced; e. g. whilst I write this, I have, by the paper affecting my eyes, that idea produced in my mind, which, whatever object causes, I call *white*; by which I know that the quality or accident (i. e. whose appearance before my eyes always causes that idea) doth really exist, and hath a being without me. And of this the greatest assurance I can possibly have, and to which my faculties can attain, is the testimony of my eyes, which are the proper and sole judges of this thing, whose testimony I have reason to rely on, as so certain, that I can no more doubt whilst I write this, that I see white and black, and that something really exists that causes that sensation in me, than that I write and move my hand.' (Book IV. chap. xi. secs. 1, 2.)

Reasons why its testimony must be trusted.

58. Reasons are afterwards given for the assurance that the 'perceptions' in question are produced in us by 'exterior causes affecting our senses.' The first (*a*) is, that 'those that want the organs of any sense never can have the ideas belonging to that sense produced in their mind.' The next (*b*), that whereas 'if I turn my eyes at noon toward the sun,

I cannot avoid the ideas which the light or the sun then produces in me;' on the other hand, 'when my eyes are shut or windows fast, as I can at pleasure recall to my mind the ideas of light or the sun, which former sensations had lodged in my memory, so I can at pleasure lay them by.' Again (*c*), 'many of those ideas are produced in us with pain which afterwards we remember without the least offence. Thus the pain of heat or cold, when the idea of it is revived in our minds, gives us no disturbance; which, when felt, was very troublesome, and is again, when actually repeated; which is occasioned by the disorder the external object causes in our body, when applied to it.' Finally (*d*), 'our senses in many cases bear witness to the truth of each other's report, concerning the existence of sensible things without us. He that sees a fire may, if he doubt whether it be anything more than a bare fancy, feel it too.' Then comes the conclusion, dangerously qualified: 'When our senses do actually convey into our understandings any idea, we cannot but be satisfied that there doth something at that time really exist without us, which doth affect our senses, and by them give notice of itself to our apprehensive faculties, and actually produce that idea which we then perceive; and we cannot so far distrust their testimony as to doubt that such collections of simple ideas, as we have observed by our senses to be united together, actually exist together. But this knowledge extends as far as the present testimony of our senses, employed about particular objects, that do then affect them, and no further. For if I saw such a collection of simple ideas as is wont to be called man, existing together one minute since, and am now alone; I cannot be certain that the same man exists now, since there is no necessary connexion of his existence a minute since with his existence now. By a thousand ways he may cease to be, since I had the testimony of my senses for his existence.' (Book IV. chap. xi. sec. 9.)

How does this account fit Locke's definition of knowledge.

59. Upon the 'knowledge of the existence of things,' thus established, it has to be remarked in the first place that, after all, according to Locke's explicit statement, it is not properly knowledge. It is 'an assurance that deserves the name of knowledge' (Book IV. chap. ii. sec. 14, and xi. sec. 3), yet being neither itself an intuition of agreement between ideas, nor resoluble into a series of such intuitions, the de-

finition of knowledge excludes it. Only if existence were itself an 'idea,' would the consciousness of the agreement of the idea with it be a case of knowledge; but to make existence an idea is to make the whole question about the agreement of ideas, as such, with existence, as such, unmeaning. To seek escape from this dilemma by calling the consciousness of the agreement in question an 'assurance' instead of knowledge is a mere verbal subterfuge. There can be no assurance of agreement between an idea and that which is no object of consciousness at all. If, however, existence is an object of consciousness, it can, according to Locke, be nothing but an idea, and the question as to the *assurance* of agreement is no less unmeaning than the question as to the *knowledge* of it. The raising of the question in fact, as Locke puts it, implies the impossibility of answering it. It cannot be raised with any significance, unless existence is external to and other than an idea. It cannot be answered unless existence is, or is given in, an object of consciousness, i. e. an idea.

Locke's account of the testimony of sense renders his question as to its veracity superfluous.

60. As usual, Locke disguises this difficulty from himself, because in answering the question he alters it. The question, *as he asks it*, is whether, given the idea, we can have posterior assurance of something else corresponding to it. The question, *as he answers it*, is whether the idea includes the consciousness of a real thing as a constituent; and the answer consists in the simple assertion, variously repeated, that it does. It is clear, however, that this answer to the latter question does not answer, but renders unmeaning, the question as it is originally asked. If, according to Locke's own showing, there is nowhere for anything to be found by us but in our 'ideas' or our consciousness—if the *thing* is given in and with the idea, so that the idea is merely the thing *ex parte nostrâ*—then to ask if the idea agrees with the thing is as futile as to ask whether hearing agrees with sound, or the voice with the words it utters. That the thing is so given is implied throughout Locke's statement of the 'assurance we have of the existence of material beings,' as well as of the confirmations of this assurance. If the 'idea which I call white' means the knowledge that 'the property or accident (i. e. whose appearance before my eyes always causes that idea) doth really exist and hath a being without me,' then consciousness of existence—outward, permanent, substantive,

and causative existence—is involved in the idea, and no ulterior question of agreement between idea and existence can properly arise. But unless the simple idea is so interpreted, the senses have no testimony to give. If it is so interpreted, no extraneous 'reason to rely upon the testimony' can be discovered, for such reason can only be a repetition of the testimony itself.

Confirmations of the testimony turn upon the distinction between 'impression and idea.'

61. This becomes clearer upon a view of the confirmations of the testimony, as Locke gives them. They all, we may remark by the way, presuppose a distinction between the simple idea as originally represented and the same as recalled or revived. This distinction, fixed by the verbal one between 'impression' and 'idea,' we shall find constantly maintained and all-important in Hume's system; but in Locke, though upon it (as we shall see) rests his distinction between real and nominal essence and his confinement of general knowledge to the latter, it seems only to turn up as an afterthought. In the account of the reality and adequacy of ideas it does not appear at all. There the distinction is merely between the simple idea, as such, and the complex, as such, without any further discrimination of the simple idea as originally produced from the same as recalled. So, too, in the opening account of the reception of simple ideas (Book II. chap. xii. sec. 1), 'Perception,' 'Retention,' and 'Discerning' are all reckoned together as alike forms of the *passivity* of the mind, in contrast with its activity in combination and abstraction, though retention and discerning have been previously described in terms which imply activity. In the 'confirmations' before us, however, the distinction between the originally produced and the revived is essential.

They depend on language which presupposes the ascription of sensation to an outward cause.

62. The first turns upon the impossibility of producing an idea *de novo* without the action of sensitive organs; the two next upon the difference between the idea as produced through these organs and the like idea as revived at the will of the individual. It is hence inferred that the idea as originally produced is the work of a thing, which must exist *in rerum naturâ*, and by way of a fourth 'confirmation' the man who doubts this in the case of one sensation is invited to try it in another. If, on seeing a fire, he thinks it 'bare fancy,' i. e. doubts whether his idea is caused by a thing, let him put his hand into it. This last 'confirmation' need not be further noticed here, since the operation of a producing thing is as

certain or as doubtful for one sensation as for another.[1] Two certainties are not more sure than one, nor can two doubts make a certainty. The other 'confirmations' alike lie in the words 'product' and 'organ.' A man has a certain 'idea:' afterwards he has another like it, but differing in liveliness and in the accompanying pleasure or pain. If he already has, or if the ideas severally bring with them, the idea of a producing outward thing to which parts of his body are organs, on the one hand, and of a self 'having power' on the other, then the liveliness, and the accompanying pleasure or pain, may become indications of the action of the thing, as their absence may be so of the action of the man's self; but not otherwise. Locke throughout, in speaking of the simple ideas as produced or recalled, implies that they carry with them the consciousness of a cause, either an outward thing or the self, and only by so doing can he find in them the needful 'confirmations' of the 'testimony of the senses.' This testimony is confirmed just because it distinguishes of itself between the work of 'nature,' which is real, and the work of the man, which is a fiction. In other words, the confirmation is nothing else than the testimony itself —a testimony which, as we have seen, since it supposes consciousness, as such, to be consciousness *of a thing*, eliminates by anticipation the question as to the agreement of consciousness with things, as with the extraneous.

63. The distinction between the real and the fantastic, according to the passages under consideration, thus depends upon that between the work of nature and the work of man. It is the confusion between the two works that renders the fantastic possible, while it is the consciousness of the distinction that sets us upon correcting it. Where all is the work of man and professes to be no more, as in the case of 'mixed modes,' there is no room for the fantastic (Book II. chap. xxx. sec. 4, and Book IV. chap. iv. sec. 7); and where there is ever so much of the fantastic, it would not be so for us, unless we were conscious of a 'work of nature,' to which to oppose it. But on looking a little closer we find that to be conscious of an idea as the work of nature, in opposition to

This ascription means the clothing of sensation with invented relations.

[1] To feel the object, in the sense of touching it, had a special significance for Locke, since touch with him was the primary 'revelation' of body, as the solid. More will be said of this when we come to consider his doctrine of 'real essence,' as constituted by primary qualities of body. See below, paragraph 101.

the work of man, is to be conscious of it under relations which, according to Locke, are the inventions of man. It is nothing else than to be conscious of it as the result of 'something having power to produce it' (Book II. chap. xxxi. sec. 2), i. e. of a substance, to which it is related as a quality. 'Nature' is just the 'something we know not what,' which is substance according to the '*abstract* idea' thereof. Producing ideas, it exercises powers, as it essentially belongs to substance to do, according to our *complex* idea of it. (Book II. chap. xxiii. secs. 9, 10.) But substance, according to Locke, whether as abstract or complex idea, is the 'workmanship of the mind,' and power, as a relation (Book II. chap. xxi. sec. 3, and chap. xxv. sec. 8), 'is not contained in the real existence of things.' Again, the idea of substance, as a source of power, is the same as the idea of cause. 'Whatever is considered by us to operate to the producing any particular simple idea, which did not before exist, hath thereby in our minds the relation of a cause.' (Book II. chap. xxvi. sec. 1.) But the idea of cause is not one 'that the mind has of things as they are in themselves,' but one that it gets by its own act in 'bringing things to, and setting them by, one another.' (Book II. chap. xxv. sec. 1.) Thus it is with the very ideas, which are the workmanship of man, that the simple idea has to be clothed upon, in order to 'testify' to its being real, i. e. (in Locke's sense) not the work of man.

What is meant by restricting the testimony of sense to *present* existence?

64. Thus invested, the simple idea has clearly lost its simplicity. It is not the momentary, isolated consciousness, but the representation of a thing determined by relations to other things in an order of nature, and causing an infinite series of resembling sensations to which a common name is applied. Thus in all the instances of sensuous testimony mentioned in the chapter before us, it is not really a simple sensation that is spoken of, but a sensation referred to a thing—not a mere smell, or taste, or sight, or feeling, but the smell of a rose, the taste of a pine-apple, the sight of the sun, the feeling of fire. (Book IV. chap. xi. secs. 4–7.) Immediately afterwards, however, reverting or attempting to revert to his strict doctrine of the mere individuality of the simple idea, he says that the testimony of the senses is a 'present testimony employed about particular objects, that do then affect them,' and that sensitive knowledge extends

no farther than such testimony. This statement, taken by itself, is ambiguous. Does it mean that sensation testifies to the momentary presence to the individual of a continuous existence, or is the existence itself as momentary as its presence to sense? The instance that follows does not remove the doubt. 'If I saw such a collection of simple ideas as is wont to be called *man*, existing together one minute since, and am now alone; I cannot be certain that the same man exists now, since there is no necessary connection of his existence a minute since with his existence now.' (Book IV. chap. xi. sec. 9.) At first sight, these words might seem to decide that the existence is merely coincident with the presence of the sensation—a decision fatal to the distinction between the real and fantastic, since, if the thing is only present with the sensation, there can be no combination of qualities in reality other than the momentary coincidence of sensations in us. Memory or imagination, indeed, might recall these in a different order from that in which they originally occurred; but, if this original order had no being after the occurrence, there could be no ground for contrasting it with the order of reproduction as the real with the merely apparent.

65. In the very sentence, however, where Locke restricts the testimony of sensation to existence present along with it, he uses language inconsistent with this restriction. The particular existence which he instances as 'testified to' is that of 'such a collection of simple ideas as is wont to be called man.' But these ideas can only be present in succession. (See Book II. chap. vii. sec. 9, and chap. xiv. sec. 3.) Even the surface of the man's body can only be taken in by successive acts of vision; and, more obviously, the states of consciousness in which his qualities of motion and action are presented occupy separate times. If then sensation only testifies to an existence present along with it, how can it testify to the co-existence (say) of an erect attitude, of which I have a present sight, with the risibility which I saw a minute ago? How can the 'collection of ideas wont to be called man,' *as co-existing*, be formed at all? and, if it cannot, how can the present existence of an object so-called be testified to by sense any more than the past? The same doctrine, which is fatal to the supposition of 'a necessary connexion between the man's existence a minute since and his

Such restriction, if maintained, would render the testimony unmeaning.

existence now,' is in fact fatal to the supposition of his existence as a complex of qualities at all. It does not merely mean that, for anything we know, the man may have died. Of course he may, and yet there may be continuity of existence according to natural laws, though not one for which we have the testimony of present sense, between the living body and the dead. What Locke had in his mind was the notion that, as existence is testified to only by present sensation, and each sensation is merely individual and momentary, there could be no testimony to the continued existence of anything. He could not, however, do such violence to the actual fabric of knowledge as would have been implied in the logical development of this doctrine, and thus he allowed himself to speak of sense as testifying to the co-existence of sensible qualities in a thing, though the individual sensation could only testify to the presence of one at a time, and could never testify to their *nexus* in a common cause at all. This testimony to co-existence in a present thing once admitted, he naturally allowed himself in the further assumption that the testimony, on its recurrence, is a testimony to the same co-existence and the same thing. The existence of the same man (he evidently supposes), to which sensation testified an hour ago, may be testified to by a like sensation now. This means that resemblance of sensation becomes identity of a thing—that like sensations occurring at different times are interpreted as representing the same thing, which continuously exists, though not testified to by sense, between the times.

But it is not maintained: the testimony is to operation of permanent identical things.

66. In short, as we have seen the simple idea of sensation emerge from Locke's inquiry as to the beginning of knowledge transformed into the judgment, 'I have an idea different from other ideas which I did not make for myself,' so now from the inquiry as to the correspondence between knowledge and reality it emerges as the consciousness of a thing now acting upon me, which has continued to exist since it acted on me before, and in which, as in a common cause, have existed together powers to affect me which have never affected me together. If in the one form the operation of thought in sense, the 'creation of the understanding' within the simple idea, is only latent or potential, in the other it is actual and explicit. The relations of substance and quality, of cause and effect, and of identity—all 'inventions of the

mind '—are necessarily involved in the immediate, spontaneous testimony of passive sense.

Locke's treatment of relations of cause and identity.

67. It will be noticed that it is upon the first of these, the relation of substance and quality, that our examination of Locke's Essay has so far chiefly gathered. In this it follows the course taken by Locke himself. Of the idea of substance, *eo nomine*, he treats at large: of cause and identity (apart from the special question of personal identity) he says little. So, too, the 'report of the senses' is commonly exhibited as announcing the sensible qualities of a thing rather than the agency of a cause or continuity of existence. The difference, of course, is mainly verbal. Sensible qualities being, as Locke constantly insists, nothing but 'powers to operate on our senses' directly or indirectly, the substance or thing, as the source of these, takes the character of a cause. Again, as the sensible quality is supposed to be one and the same in manifold separate cases of being felt, it has identity in contrast with the variety of these cases, even as the thing has, on its part, in contrast with the variety of its qualities. Something, however, remains to be said of Locke's treatment of the ideas of cause and identity in the short passages where he treats of them expressly. Here, too, we shall find the same contrast between the given and the invented, tacitly contradicted by an account of the given in terms of the invented.

That fro which he derives idea of cause presupposes it.

68. The relation of cause and effect, according to Locke's general statement as to relation, must be something 'not contained in the real existence of things, but extraneous and superinduced.' (Book II. chap. xxv. sec. 8.) It is a 'complex idea,' not belonging to things as they are in themselves, which the mind makes by its own act. (Book II. chap xii. secs. 1, 7, and chap. xxv. sec. 1.) Its origin, however, is thus described:—'In the notice that our senses take of the constant vicissitude of things, we cannot but observe that several particular, both qualities and substances, begin to exist; and that they receive this their existence from the due application and operation of some other being. From this observation we get our ideas of cause and effect. That which produces any simple or complex idea we denote by the general name cause; and that which is produced, effect. Thus, finding that in that substance which we call wax, fluidity, which is a simple idea that was not in it before, is constantly pro-

duced by the application of a certain degree of heat, we call the simple idea of heat, in relation to fluidity in wax, the cause of it, and fluidity the effect. So, also, finding that the substance, wood, which is a certain collection of simple ideas so-called, by the application of fire is turned into another substance called ashes, i.e. another complex idea, consisting of a collection of simple ideas, quite different from that complex idea which we call wood; we consider fire, in relation to ashes, as cause, and the ashes as effect.' Here we find that the 'given,' upon which the relation of cause and effect is 'superinduced' or from which the 'idea of it is got' (to give Locke the benefit of both expressions), professedly, according to the first sentence of the passage quoted, involves the complex or derived idea of substance. The sentence, indeed, is a remarkable instance of the double refraction which arises from redundant phraseology. Our senses are supposed to 'take notice of a constant vicissitude of things,' or substances. Thereupon we observe, what is necessarily implied in this vicissitude, a beginning of existence in substances or their qualities, 'received from the due application or operation of some other being.' Thereupon we infer, what is simply another name for existence thus given and received, a relation of cause and effect. Thus not only does the *datum* of the process of 'invention' in question, i.e. the observation of change in a thing, involve a *derived* idea, but a derived idea which presupposes just this process of invention.

Rationale of this 'petitio principii.'

69. Here again it is necessary to guard against the notion that Locke's obvious *petitio principii* might be avoided by a better statement without essential change in his doctrine of ideas. It is true that 'a notice of the vicissitude of things' includes that 'invention of the understanding' which it is supposed to suggest, but state the primary knowledge otherwise—reduce the vicissitude of things, as it ought to be reduced, in order to make Locke consistent, to the mere multiplicity of sensations—and the appearance of suggestion ceases. Change or 'vicissitude' is quite other than mere diversity. It is diversity relative to something which maintains an identity. This identity, which ulterior analysis may find in a 'law of nature,' Locke found in 'things' or 'substances.' By the same unconscious subreption, by which with him a sensible thing takes the place of sensation, 'vicissitude of things' takes the place of multiplicity of sensa-

tions, carrying with it the observation that the changed state of the thing is due to something else. The mere multiplicity of sensations could convey no such 'observation,' any more than the sight of counters in a row would convey the notion that one 'received its existence' from the other. Only so far as the manifold appearances are referred, as its vicissitudes, to something which remains one, does any need of accounting for their diverse existence, or in consequence any observation of its derivation 'from some other being,' arise. Locke, it is true, after stating that it is upon a notice of the vicissitude of things that the observation in question rests, goes on to speak as if an *origination* of substances, which is just the opposite of their vicissitude, might be observed; and the second instance of production which he gives—that of ashes upon the burning of wood—seems intended for an instance of the production of a substance, as distinct from the production of a quality. He is here, however, as he often does, using the term 'substance' loosely, for 'a certain collection of simple ideas,' without reference to the 'substratum wherein they do subsist,' which he would have admitted to be ultimately the same for the wood and for the ashes. The conception, indeed, of such a substratum, whether vaguely as 'nature,' or more precisely as a 'real constitution of insensible parts' (Book III. chap. iii. secs. 18, &c.), governed all his speculation, and rendered to him what he here calls *substance* virtually a *mode*, and its production properly a 'vicissitude.'

Relation of cause has to be put into sensitive experience in order to be got from it.

70. We thus find that it is only so far as simple ideas are referred to things—only so far as each in turn, to use Locke's instance, is regarded as an appearance 'in a substance which was not in it before'—that our sensitive experience, the supposed *datum* of knowledge, is an experience of the vicissitudes of things; and again, that only as an experience of such vicissitude does it furnish the 'observation from which we get our ideas of cause and effect.' But the reference of a sensation to a sensible thing means its reference to a cause. In other words, the invented relation of cause and effect must be found in the primary experience in order that it may be got from it.[1]

[1] Locke's contradiction of himself in regard to this relation might be exhibited in a still more striking light by putting side by side with his account of it his account of the idea of power. The two are precisely similar, the idea of power being represented as got by a notice of the alteration of simple ideas

Origin of the idea of identity according to Locke.

71. The same holds of that other 'product of the mind,' the relation of identity. This 'idea' according to Locke, is formed when, 'considering anything as existing at any determined time and place, we compare it with itself existing at another time.' 'In this consists identity,' he adds, 'when the ideas it is attributed to, vary not at all from what they were that moment wherein we consider their former existence, and to which we compare the present; for we never finding nor conceiving it possible that two things of the same kind should exist in the same place at the same time, we rightly conclude that whatever exists anywhere, at any time, excludes all of the same kind, and is there itself alone. When, therefore, we demand whether anything be the same or no? it refers always to something that existed such a time in such a place, which it was certain at that instant was the same with itself, and no other; from whence it follows that one thing cannot have two beginnings of existence, nor two things one beginning; it being impossible for two things of the same kind to be or exist in the same instant in the very same place, or one and the same thing in different places. That, therefore, that had one beginning, is the same thing; and that which had a different beginning in time and place from that is not the same, but diverse.' He goes on to inquire about the *principium individuationis*, which he decides is 'existence itself, which determines a being of any sort to a particular time and place, incommunicable to two beings of the same kind . . . for being at that instant what it is and nothing else, it is the same, and so must continue as long as its existence is continued; for so long it will be the same, and no other.' (Book II. chap. xxvii. secs. 1—3).

Relation of identity not to be distinguished from idea of it.

72. It is essential to bear in mind with regard to identity, as with regard to cause and effect, that no distinction according to Locke can legitimately be made between the relation and the idea of the relation. As to substance, it is true, he was driven in his controversy with Stillingfleet to distinguish between 'the being and the idea thereof,' but in dealing with relation he does not attempt any such violence to his proper system. Between the 'idea' as such and

in things without (Book II. chap. xxi. sec. 1), just as the idea of cause and effect is. Power, too, he expressly says, is a relation. Yet, although the idea of it, both as derived and as of a relation, ought to be complex, he reckons it a simple and original one, and by using it interchangeably with 'sensible quality' makes it a primary *datum* of sense.

'being' as such, his 'new way of ideas,' as Stillingfleet plaintively called it, left no fair room for distinction. In this indeed lay its permanent value for speculative thought. The distinction by which alone it could consistently seek to replace the old one, so as to meet the exigencies of language and knowledge, was that between simple ideas, as given and necessarily real, and the reproductions or combinations in which the mind may alter them. But since every relation implies a putting together of ideas, and is thus always, as Locke avows, a complex idea or the work of the mind, a distinction between its being and the idea thereof, in that sense of the distinction in which alone it can ever be consistently admitted by Locke, was clearly inadmissible. Thus in the passages before us the relation of identity is not explicitly treated as an original 'being' or 'existence.' It is an idea formed by the mind upon a certain 'consideration of things' being or existent. But on looking closely at Locke's account, we find that it is only so far as it already belongs to, nay constitutes, the things, that it is formed upon consideration of them.

This 'invented' relation forms the 'very being of things.'

73. When it is said that the idea of identity, or of any other relation, is formed upon consideration of things as existing in a certain way, this is naturally understood to mean—indeed, otherwise it is unmeaning—that the things are first *known* as existing, and that afterwards the idea of the relation in question is formed. But according to Locke, as we have seen,[1] the first and simplest act of knowledge possible is the perception of identity between ideas. Either then the 'things,' upon consideration of which the idea of identity is formed, are not known at all, or the knowledge of them involves the very idea afterwards formed on consideration of them. Locke, having at whatever cost of self-contradiction to make his theory fit the exigencies of language, virtually adopts the latter alternative, though with an ambiguity of expression which makes a definite meaning difficult to elicit. We have, however, the positive statement to begin with, that the comparison in which the relation originates, is of a thing with itself as existing at another time. Again, the 'ideas' (used interchangeably with 'things'), to which identity is attributed, 'vary not at all from what they were at that moment wherein we consider their former existence.' It is here clearly implied that 'things' or 'ideas' *exist*, i.e. are

[1] See above, paragraph 25.

given to us in the spontaneous consciousness which we do not make, as each one and the same throughout a multiplicity of times. This, again, means that the relation of identity or sameness, i.e. unity of thing under multiplicity of appearance, belongs to or consists in the 'very being' of those given objects of consciousness, which are in Locke's sense the real, and upon which according to him all relation is superinduced by an after-act of thought. So long as each such object 'continues to exist,' so long its 'sameness with itself must continue,' and this sameness is the complex idea, the relation, of identity. Just as before, following Locke's lead, we found the simple idea, as the element of knowledge, become complex—a perceived identity of ideas; so now mere existence, the 'very being of things' (which with Locke is only another name for the simple idea), resolves itself into a relation, which it requires 'consideration by the mind' to constitute.

Locke fails to distinguish between identity and mere unity.

74. The process of self-contradiction, by which a 'creation of the mind' finds its way into the real or given, must also appear in a contradictory conception of the real itself. Kept pure of all that Locke reckons intellectual fiction, it can be nothing but a simple chaos of individual units: only by the superinduction of relation can there be sameness, or continuity of existence, in the minutest of these for successive moments. Locke presents it arbitrarily under the conception of mere individuality or of continuity, according as its distinction from the work of the mind, or its intelligible content, happens to be before him. A like see-saw in his account of the individuality and generality of ideas has already been noticed.[1] In his discussion of identity the contradiction is partly disguised by a confusion between mere unity on the one hand, and sameness or unity in difference, on the other. Thus, after starting with an account of identity as belonging to ideas which are the same *at different times*, he goes on to speak of a thing as the same with itself, *at a single instant*. So, too, by the *principium individuationis*, he understands 'existence itself, which determines a being of any sort to a particular time and place.' As it is clear from the context that by the *principium individuationis* he meant the source of identity or sameness, it will follow that by 'sameness' he understood singleness of a thing in a single time and place. Whence then the plurality, without which 'sameness' is

[1] See above, paragraphs 43, and the following.

unmeaning? In fact, Locke, having excluded it in his definition, covertly brings it back again in his instance, which is that of 'an atom, i.e. a continued body under one immutable superficies, existing in a determined time and place.' This, 'considered in any instant of its existence, is in that instant the same with itself.' But it is so because—and, if we suppose the consideration of plurality of *times* excluded, *only* because —it is a '*continued*' body, which implies, though its place be determined, that it exists in a *plurality of parts of space*. Either this plurality, or that of instants of its existence, must be recognised in contrast with the unity of body, if this unity is to become 'sameness with itself.' In adding that not only at the supposed instant is the atom the same, but 'so must continue as long as its existence continues,' Locke shows that he really thought of the identical body under a plurality of times *ex parte post*, if not *ex parte ante*.

Feelings are the real, and do not admit of identity. How then can identity be real?

75. But how is this continuity, or sameness of existence in plurality of times or spaces, compatible with the constitution of 'real existence' by mere *individua?* The difficulty is the same, according to Locke's premisses, whether the simple ideas by themselves are taken for the real *individua*, or whether each is taken to represent a single separate thing. In his chapter on identity he expressly says that 'things whose existence is in succession' do not admit of identity. Such, he adds, are motion and thought; 'because, each perishing the moment it begins, they cannot exist in different times or in different places as permanent beings can at different times exist in distant places.' (Book I. chap. xxvii. sec. 2.) What he here calls 'thought' clearly includes the passive consciousness in which alone, according to his strict doctrine, reality is given. So elsewhere (Book II. chap. vii. sec. 9), in accounting for the 'simple idea of succession,' he says generally that 'if we look immediately into ourselves we shall find our ideas always, whilst we have any thought, passing in train, one going and another coming, without intermission.'[1] No statement of the 'perpetual flux' of ideas, as each having a separate beginning and end, and ending in the very moment

[1] It is true that in this place Locke distinguishes between the 'suggestion by our senses' of the idea of succession, and that which passes in our 'minds,' by which it is 'more constantly offered us.' But since, according to him, the idea of sensation must be 'produced in the mind' if there is to be any either sensation or idea at all (Book II. chap. ix. secs. 3 and 4), the distinction between the 'suggestion by our senses' and what 'passes in our minds' cannot be maintained.

when it begins, can be stronger than the above. If 'ideas' of any sort, according to this account of them, are to constitute real existence, no sameness can be found in reality. It must indeed be a relation 'invented by the mind.'

Yet it is from reality that the idea of it is derived.

76. This, it may be said, is just the conclusion that was wanted in order to make Locke's doctrine of the particular relation of identity correspond with his general doctrine of the fictitiousness of relations. To complete the consistency, however, his whole account of the origin of the relation (or of the idea in which it consists) must be changed, since it supposes it to be derived from an observation of things or existence, which again is to suppose sameness to be in the things or to be real. This change made, philosophy would have to start anew with the problem of accounting for the origin of the fictitious idea. It would have to explain how it comes to pass that the mind, if its function consists solely in reproducing and combining given ideas, or again in 'abstracting' combined ideas from each other, should be able to invent a relation which is neither a given idea, nor a reproduction, combination, or abstract residuum of given ideas. This is the great problem which we shall find Hume attempting. Locke really never saw its necessity, because the dominion of language—a dominion which, as he did not recognise it, he had no need to account for—always, in spite of his assertion that simple ideas are the sole *data* of consciousness, held him to the belief in another *datum* of which ideas are the appearances, viz., a thing having identity, because the same with itself in the manifold times of its appearance. This *datum*, under various guises, but in each demonstrably, according to Locke's showing, a 'creation of thought,' has met us in all the modes of his theory, as the condition of knowledge. As the 'abstract idea' of substance it renders 'perishing' ideas into qualities by which objects may be discerned. (Book II. chap. xi. sec. 1.) As the relative idea of cause, it makes them 'affections' to be accounted for. As the fiction of a universal, it is the condition of their mutual qualification as constituents of a whole. Finally, as the 'superinduced' relation of sameness, the direct negative of the perpetual beginning and ending of 'ideas,' it constitutes the 'very being of things.'

Transition to Locke's doctrine of essence.

77. 'The very being of things,' let it be noticed, according to what Locke reckoned their 'real,' as distinct from their

'nominal,' essence. The consideration of this distinction has been hitherto postponed; but the discussion of the relation of identity, as subsisting between the parts of a 'continued body,' brings us upon the doctrine of matter and its 'primary qualities,' which cannot be properly treated except in connection with the other doctrine (which Locke unhappily kept apart) of the two sorts of 'essence.' So far, it will be remembered, the 'facts' or *given* ideas, which we have found him unawares converting into theories or 'invented' ideas, have been those of the 'secondary qualities of body.'[1] It is these which are united into things or substances, having been already 'found in them:' it is from these that we 'infer' the relation of cause and effect, because as 'vicissitudes of things' or 'affections of sense' they presuppose it: it is these again which, as 'received from without,' testify the present existence of something, because in being so received they are already interpreted as 'appearances of something.' That the 'thing,' by reference to which these ideas are judged to be 'real,' 'adequate,' and 'true'—or, in other words, become elements of a knowledge—is yet itself according to Locke's doctrine of substance and relation a 'fiction of thought,' has been sufficiently shown. That it is so no less according to his doctrine of essence will also appear. The question will then be, whether by the same showing the ideas of body, of the self, and of God, can be other than fictions, and the way will be cleared for Hume's philosophic adventure of accounting for them as such.

78. In Locke's doctrine of 'ideas of substances,' the 'thing' appeared in two inconsistent positions: on the one hand, as that in which they 'are found;' on the other, as that which results from their concretion, or which, such concretion having been made, we accustom ourselves to suppose as its basis. This inconsistency, latent to Locke himself in the theory of substance, comes to the surface in the theory of essence, where it is (as he thought) overcome, but in truth only made more definite, by a distinction of terms.

This repeats the inconsistency found in his doctrine of substance.

79. This latter theory has so far become part and parcel of the 'common sense' of educated men, that it might seem scarcely to need restatement. It is generally regarded as completing the work, which Bacon had begun, of transferring

Plan to be followed.

[1] See above, paragraph 20.

philosophy from the scholastic bondage of words to the fruitful discipline of facts. In the process of transmission and popular adaptation, however, its true significance has been lost sight of, and it has been forgotten that to its original exponent implicitly—explicitly to his more logical disciple—though it did indeed distinguish effectively between things and the meaning of words, it was the analysis of the latter only, and not the understanding of things, that it left as the possible function of knowledge. It will be well, then, in what follows, first briefly to restate the theory in its general form; then to show how it conflicts with the actual knowledge which mankind supposes itself to have attained; and finally to exhibit at once the necessity of this conflict as a result of Locke's governing ideas, and the ambiguities by which he disguised it from himself.

What Locke understood by essence.'

80. The essence of a thing with Locke, in the only sense in which we can know or intelligibly speak of it, is the meaning of its name. This, again, is an 'abstract or general idea,' which means that it is an idea 'separated from the circumstances of time and place, and any other ideas that may determine it to this or that particular existence. By this way of abstraction it is made capable of representing more individuals than one; each of which, having in it a conformity to that abstract idea, is (as we call it) of that sort.' (Book III. chap. iii. sec. 6.) That which is given in immediate experience, as he proceeds to explain, is this or that 'particular existence,' Peter or James, Mary or Jane, such particular existence being already a complex idea.[1] That it should be so is indeed in direct contradiction to his doctrine of the primariness of the simple idea, but is necessary to his doctrine of abstraction. Some part of the complex idea (it is supposed)—less or more—we proceed to leave out. The minimum of subtraction would seem to be that of the 'circumstances of time and place,' in which the particular existence is given. This is the 'separation of ideas,' first made, and alone suffices to constitute an 'abstract idea,' even though, as is the case with the idea of the sun, there is only one 'particular substance' to agree with it. (Book III. chap. vi. sec. 1.) In proportion as the particular substances compared are more various, the subtraction of ideas is larger, but, be it less or more, the remainder is the abstract

[1] Book III. chap. iii. sec. 7, at the end.

idea, to which a name—e.g. man—is annexed, and to which as a 'species' or 'standard' other particular existences, on being 'found to agree with it,' may be referred, so as to be called by the same name. These ideas then, 'tied together by a name,' form the essence of each particular existence, to which the same name is applied (Book III. chap. iii. secs. 12 and the following.) Such essence, however, according to Locke, is 'nominal,' not 'real.' It is a complex—fuller or emptier—of ideas in us, which, though it is a 'uniting medium between a general name and particular beings,'[1] in no way represents the qualities of the latter. These, consisting in an 'internal constitution of insensible parts,' form the 'real essence' of the particular beings; an essence, however, of which we can know nothing. (Book III. chap. vi. sec. 21, and ix. sec. 12.)

Only to nominal essences that general propositions relate,

81. It is the formation of 'nominal essences' that renders general propositions possible. 'General certainty,' says Locke, 'is never to be found but in our ideas. Whenever we go to seek it elsewhere in experiment or observation without us, our knowledge goes not beyond particulars. It is the contemplation of our own abstract ideas, that alone is able to afford us general knowledge.' (Book IV. chap. vi. sec. 16.) 'General knowledge,' he says again, 'lies only in our own thoughts.'[2] (Book IV. chap. vi. sec. 13.) This use of 'our ideas' and 'our own thoughts' as equivalent phrases, each antithetical to 'real existence,' tells the old tale of a deviation from 'the new way of ideas' into easier paths. According to this new way in its strictness, as we have sufficiently seen, there is nowhere for anything to be found but 'in our ideas.' It therefore in no way distinguishes general knowledge or certainty that it cannot be found elsewhere. Locke, however, having allowed himself in the supposition that simple ideas report a real existence, other than themselves, but to which they are related as ectype to archetype, tacitly proceeds to convert them into real existences, to which ideas in general, as mere thoughts of our own, may be opposed. Along with this conversion, there supervenes upon the original distinction between simple and complex ideas, which alone does duty in the Second Book of the Essay, another distinction, essential to Locke's doctrine of the 'reality' of knowledge—that between the idea, whether

[1] Book III. chap. iii. sec. 13.

[2] Cf. Book IV. chap. iii. sec. 31.

i.e. only to abstract ideas having no real existence.

simple or complex, as originally given in sensation, and the same as retained or reproduced in the mind. It is only in the former form that the idea, however simple, reports, and thus (with Locke) itself is, a real existence. Such real existence is a 'particular' existence, and our knowledge of it a 'particular' knowledge. In other words, according to the only consistent doctrine that we have been able to elicit from Locke,[1] it is a knowledge which consists in a consciousness, upon occasion of a present sensation—say, a sensation of redness—that some object is present here and now causing the sensation; an object which, accordingly, must be 'particular' or transitory as the sensation. The 'here and now,' as in such a case they constitute the particularity of the object of consciousness, so also render it a real existence. Separate these ('the circumstances of time and place'[2]) from it, and it at once loses its real existence and becomes an 'abstract idea,' one of 'our own thoughts,' of which as 'in the mind' agreement or disagreement with some other abstract idea can be asserted in a general proposition; e.g. 'red is not blue.' (Book IV. chap. vii. sec. 4.)[3]

An abstract idea may be a simple one.

82. It is between simple ideas, it will be noticed, that a relation is here asserted, and in this respect the proposition differs from such an one as may be formed when simple ideas have been compounded into the nominal essence of a thing, and in which some one of these may be asserted of the thing, being already included within the meaning of its name; e.g. 'a rose has leaves.' But as expressing a relation between ideas 'abstract' or 'in the mind,' in distinction from present sensations received from without, the two sorts of proposition, according to the doctrine of Locke's Fourth Book, stand on the same footing.[4] It is a nominal essence with which both alike are concerned, and on this depends the general certainty or self-evidence, by which they are distinguished from 'experiment or observation without us.' These can never 'reach with certainty farther than the bare

[1] See above, paragraph 56.

[2] Book III. chap. iii. sec. 6.

[3] In case there should be any doubt as to Locke's meaning in this passage, it may be well to compare Book IV. chap. ix. sec. 1. There he distinctly opposes the consideration of ideas in the understanding to the knowledge of real existence. Here (Book IV. chap. vii. sec. 4) he distinctly speaks of the proposition 'red is not blue' as expressing a consideration of ideas in the understanding. It follows that it is not a proposition as to real existence.

[4] Already in Book II. (chap. xxxi. sec. 12), the simple idea, as abstract, is spoken of as a nominal essence.

instance' (Book IV. chap. vi. sec. 7): i.e., though the only channels by which we can reach real existence, they can never tell more than the presence of this or that sensation as caused by an unknown thing without, or the present disagreement of such present sensations with each other. As to the recurrence of such sensations, or any permanently real relation between them, they can tell us nothing. Nothing as to their recurrence, because, though in each case they show the presence of something causing the sensations, they show nothing of the real essence upon which their recurrence depends.[1] Nothing as to any permanently real relation between them, because, although the disagreement between ideas of blue and red, and the agreement between one idea of red and another, *as in the mind*, is self-evident, yet as thus in the mind they are not 'actual sensations' at all (Book IV. chap. xi. sec. 6), nor do they convey that 'sensitive knowledge of particular existence,' which is the only possible knowledge of it. (Book IV. chap. iii. sec. 21.) As actual sensations and indices of reality, they do indeed differ in this or that 'bare instance,' but can convey no certainty that the real thing or 'parcel of matter' (Book III. chap. iii. sec. 18), which now causes the sensation of (and thus *is*) red, may not at another time cause the sensation of (and thus *be*) blue.[2]

How then is science of nature possible?

83. We thus come upon the crucial antithesis between relations of ideas and matters of fact, with the exclusion of general certainty as to the latter, which was to prove such a potent weapon of scepticism in the hands of Hume. Of

[1] Cf. Book IV. chap. vi. sec. 5. 'If we could certainly know (which is impossible) where a real essence, which we know not, is—e.g. in what parcels of matter the real essence of gold is; yet could we not be sure, that this or that quality could with truth be affirmed of gold; since it is impossible for us to know that this or that quality or idea has a necessary connexion with a real essence, of which we have no idea at all.'

Several passages, of course, can be adduced from Locke which are inconsistent with the statement in the text: e.g. Book IV. chap. iv. sec. 12. 'To make knowledge real concerning substances, the ideas must be taken from the real existence of things. Whatever simple ideas have been found to coexist in any substance, these we may with confidence join together again, and so make abstract ideas of substances. For whatever have once had an union in nature, may be united again.' In all such passages, however, as will appear below, the strict opposition between the real and the mental is lost sight of, the 'nature' or 'substance,' in which ideas 'have a union,' or are 'found to coexist,' being a system of relations which, according to Locke, it requires a mind to constitute, and thus itself a 'nominal essence.'

[2] Cf. Book IV. chap. iii. sec. 29; Book IV. chap. vi. sec. 14; Book IV. chap. xi. sec. 11.

its incompatibility with recognized science we can have no stronger sign than the fact that, after more than a century has elapsed since Locke's premisses were pushed to their legitimate conclusion, the received system of logic among us is one which, while professing to accept Locke's doctrine of essence, and with it the antithesis in question, throughout assumes the possibility of general propositions as to matters of fact, and seeks in their methodical discovery and proof that science of nature which Locke already 'suspected' to be impossible. (Book IV. chap. xii. sec. 10.)

No 'uniformities of phenomena' can be known.

84. That, so far as any inference from past to future uniformities is necessary to the science of nature, his doctrine does more than justify such 'suspicion,' is plain enough. Does it, however, leave room for so much as a knowledge of past uniformities of fact, in which the natural philosopher, accepting the doctrine, might probably seek refuge? At first sight, it might seem to do so. 'As, when our senses are actually employed about any object, we do know that it does exist; so by our memory we may be assured that heretofore things that affected our senses have existed—and thus we have knowledge of the past existence of several things, whereof our senses having informed us, our memories still retain the ideas.' (Book IV. chap. xi. sec. 11.) Let us see, however, how this knowledge is restricted. 'Seeing water at this instant, it is an unquestionable truth to me that water doth exist; and remembering that I saw it yesterday, it will also be always true, and as long as my memory retains it, always an undoubted proposition to me, that water did exist the 18th of July, 1688; as it will also be equally true that a certain number of very fine colours did exist, which at the same time I saw on a bubble of that water; but being now quite out of sight both of the water and bubbles too, it is no more certainly known to me that the water doth now exist, than that the bubbles and colours therein do so; it being no more necessary that water should exist to-day because it existed yesterday, than that the colours or bubbles exist to-day because they existed yesterday.'—(*Ibid.*)

Locke not aware of the full effect of his own doctrine,

85. The result is that though I may enumerate a multitude of past matters-of-fact about water, I cannot gather them up in any general statement about it as a real existence. So soon as I do so, I pass from water as a real

existence to its 'nominal essence,' i.e., to the ideas retained in my mind and put together in a fictitious substance, to which I have annexed the name 'water.' If we proceed to apply this doctrine to the supposed past matters-of-fact themselves, we shall find these too attenuating themselves to nonentity. Subtract in every case from the 'particular existence' of which we have 'sensitive knowledge' the qualification by ideas which, as retained in the mind, do not testify to a present real existence, and what remains? There is a certainty, according to Locke (Book IV. chap. xi. sec. 11), not, indeed, that water exists to-day because it existed yesterday—this is only 'probable'—but that it has, as a past matter-of-fact, at this time and that 'continued long in existence,' because this has been 'observed;' which must mean (Book IV. chap. ii. secs. 1, 5, and 9), because there has been a continued 'actual sensation' of it. 'Water,' however, is a complex idea of a substance, and of the elements of this complex idea those only which at any moment are given in 'actual sensation' may be accounted to 'really exist.' First, then, must disappear from reality the 'something,' that unknown substratum of ideas, of which the idea is emphatically 'abstract.' This gone, we naturally fall back upon a fact of co-existence between ideas, as being a reality, though the 'thing' be a fiction. But if this co-existence is to be real or to represent a reality, the ideas between which it obtains must be 'actual sensations.' These, whatever they may be, are at least opposed by Locke to ideas retained in the mind, which only form a nominal essence. But it is the association of such nominal essence, in the supposed observation of water, with the actual sensation that alone gives the latter a meaning. Set this aside as unreal, and the reality, which the sensation reveals, is at any rate one of which nothing can be said. It cannot be a relation between sensations, for such relation implies a consideration of them by the mind, whereby, according to Locke, they must cease to be 'real existences.' (Book II. chap. xxv. sec. 1.) It cannot even be a single sensation *as continuously observed*, for every present moment of such observation has at the next become a past, and thus the sensation observed in it has lost its 'actuality,' and cannot, *as a 'real existence*,' qualify the sensation observed in the next. Restrict the 'real existence,' in short, as Locke does, to an 'actual present sensa-

tion,' which can only be defined by opposition to an idea retained in the mind, and at every instant of its existence it has passed into the mind and thus ceased really to exist. Reality is in perpetual process of disappearing into the unreality of thought. No point can be fixed either in the flux of time or in the imaginary process from 'without' to 'within' the mind, on the one side of which can be placed 'real existence,' on the other the 'mere idea.' It is only because Locke unawares defines to himself the 'actual sensation' as representative of a real essence, of which, however, according to him, as itself unknown, the presence is merely inferred from the sensation, that the 'actual sensation' itself is saved from the limbo of nominal essence, to which ideas, as abstract or in the mind, are consigned. Only, again, so far as it is thus illogically saved, are we entitled to that distinction between 'facts' and 'things of the mind,' which Locke once for all fixed for English philosophy.

which is, to make the real an abstract residuum of consciousness.

86. By this time we are familiar with the difficulties which this antithesis has in store for a philosophy which yet admits that it is only in the mind or in relation to consciousness —in one word, as 'ideas'—that facts are to be found at all, while by the 'mind' it understands an abstract generalization from the many minds which severally are born and grow, sleep and wake, with each of us. The antithesis itself, like every other form in which the impulse after true knowledge finds expression, implies a distinction between the seeming and the real; or between that which exists for the consciousness of the individual and that which really exists. But outside itself consciousness cannot get. It is there that the real must, at any rate, manifest itself, if it is to be found at all. Yet the original antithesis between the mind and its unknown opposite still prevails, and in consequence that alone which, though indeed in the mind, is yet given to it by no act of its own, is held to represent the real. This is the notion which dominates Locke. He strips from the formed content of consciousness all that the mind seems to have done for itself, and the abstract residuum, that of which the individual cannot help being conscious at each moment of his existence, is or 'reports' the real, in opposition to the mind's creation. This is Feeling; or more strictly—since it exists, and whatever does so must exist as one in a number (Book II. chap. vii. sec. 7)—it is the multitude

of single feelings, 'each perishing the moment it begins' (Book II. chap. xxvii. sec. 2), from which all the definiteness that comes of composition and relation must be supposed absent. Thus, in trying to get at what shall be the mere fact in detachment from mental accretions, Locke comes to what is still consciousness, but the merely indefinite in consciousness. He seeks the real and finds the void. Of the real as outside consciousness nothing can be said; and of that again within consciousness, which is supposed to represent it, nothing can be said.

Ground of distinction between actual sensation and ideas in the mind is itself a thing of the mind.

87. We have already seen how Locke, in his doctrine of secondary qualities of substances, practically gets over this difficulty; how he first projects out of the simple ideas, under relations which it requires a mind to constitute, a cognisable system of things, and then gives content and definiteness to the simple ideas in us by treating them as manifestations of this system of things. In the doctrine of propositions, the proper correlative to the reduction of the real to the present simple idea, as that of which we cannot get rid, would be the reduction of the 'real proposition' to the mere 'it is now felt.' If the matter-of-fact is to be that in consciousness which is independent of the 'work of the mind' in comparing and compounding, this is the only possible expression for it. It states the only possible 'real essence,' which yet is an essence of nothing, for any reference of it to a thing, if the thing is outside consciousness, is an impossibility; and if it is within consciousness, implies an 'invention of the mind' both in the creation of a thing, 'always the same with itself,' out of perishing feelings, and in the reference of the feelings to such a thing. Thus carried out, the antithesis between 'fact' and 'creation of the mind' becomes self-destructive, for, one feeling being as real as another, it leaves no room for that distinction between the real and fantastic, to the uncritical sense of which it owes its birth. To avoid this fusion of dream-land and the waking world, Locke avails himself of the distinction between the idea (i.e. feeling) as in the mind, which is not convertible with reality, and the idea as somewhere else, no one can say where—'the actual sensation'—which is so convertible. The distinction, however, must either consist in degrees of liveliness, in which case there must be a corresponding infinity of degrees of reality or unreality, or else must presuppose a

real existence from which the feeling, if 'actual sensation,' *is*—if merely 'in the mind' *is not*—derived. Such a real existence either is an object of consciousness, or is not. If it is not, no distinction between one kind of feeling and another can for consciousness be derived from it. If it is, then, granted the distinction between given feelings and creations of the mind, it must fall to the latter, and a 'thing of the mind' turns out to be the ground upon which 'fact' is opposed to 'things of the mind.'

Two meanings of real essence.

88. It remains to exhibit briefly the disguises under which these inherent difficulties of his theory of essence appear in Locke. Throughout, instead of treating 'essence' altogether as a fiction of the mind—as it must be if feelings in simplicity and singleness are alone the real—he treats indeed as a merely 'nominal essence' every possible combination of ideas of which we can speak, but still supposes another essence which is 'real.' But a real essence of what? Clearly, according to his statements, of the same 'thing' of which the combination of ideas in the mind is the nominal essence. Indeed, there is no meaning in the antithesis unless the 'something,' of which the latter essence is so nominally, is that of which it is not so really. So says Locke, 'the nominal essence of gold is that complex idea the word gold stands for; let it be, for instance, a body yellow, of a certain weight, malleable, fusible, and fixed. But the real essence is the constitution of the insensible parts *of that body*, on which those qualities and all the other properties of gold depend.' (Book III. chap. vi. sec. 2.) Here the notion clearly is that of one and the same thing, of which we can only say that it is a 'body,' a certain complex of ideas—yellowness, fusibility, &c.—is the nominal, a certain constitution of insensible parts the real, essence. It is on the real essence, moreover, that the ideas which constitute the nominal depend. Yet while they are known, the real essence (as appears from the context) is wholly unknown. In this case, it would seem, the cause is not known from its effects.

According to one, it is a collection of ideas as qualities of a thing:

89. There are lurking here two opposite views of the relation between the nominal essence and the real thing. According to one view, which prevails in the later chapters of the Second Book and in certain passages of the third, the relation between them is that with which we have already become familiar in the doctrine of substance—that, namely,

between ideas as in us and the same as in the thing. (Book II. chap. xxiii. secs. 9 and 10.) No distinction is made between the 'idea in the mind' and the 'actual sensation.' The ideas in the mind are also in the thing, and thus are called its qualities, though for the most part they are so only secondarily, i.e. as effects of other qualities, which, as copied directly in our ideas, are called primary, and relatively to these effects are called powers. These powers have yet innumerable effects to produce in us which they have not yet produced. (Book II. chap. xxxi. sec. 10.) Those which have been so far produced, being gathered up in a complex idea to which a name is annexed, form the 'nominal essence' of the thing. Some of them are of primary qualities, more are of secondary. The originals of the former, the powers to produce the latter, together with powers to produce an indefinite multitude more, will constitute the 'real essence,' which is thus 'a standard made by nature,' to which the nominal essence is opposed merely as the inadequate to the adequate. The ideas, that is to say, which are indicated by the name of a thing, have been really 'found in it' or 'produced by it,' but are only a part of those that remain to be found in it or produced by it. It is in this sense that Locke opposes the adequacy between nominal and real essence in the case of mixed modes to their perpetual inadequacy in the case of ideas of substances. The combination in the one case is artificially made, in the other is found and being perpetually enlarged. This he illustrates by imagining the processes which led Adam severally to the idea of the mixed mode 'jealousy' and that of the substance 'gold.' In the former process Adam 'put ideas together only by his own imagination, not taken from the existence of anything . . . . . the standard there was of his own making.' In the latter, 'he has a standard made by nature; and therefore being to represent that to himself by the idea he has of it, even when it is absent, he puts no simple idea into his complex one, but what he has the perception of from the thing itself. He takes care that his idea be conformable to this archetype.' (Book III. chap. vi. secs. 46, 47.) 'It is plain,' however, 'that the idea made after this fashion by this archetype will be always inadequate.'

about real essence in this sense

90. The nominal essence of a thing, then, according to this view, being no other than the 'complex idea of a sub-

there may be general knowledge.

stance,' is a copy of reality, just as the simple idea is. It is 'a picture or representation in the mind of a thing that does exist by ideas of those qualities that are discoverable in it.' (Book II. chap. xxxi. secs. 6, 8.) It only differs from the simple idea (which is itself, as abstract, a nominal essence)[1] in respect of reality, because the latter is a copy or effect produced singly and involuntarily, whereas we may put ideas together, as if in a thing, which have never been so presented together, and, on the other hand, never can put together all that exist together. (Book II. chap. xxx. sec. 5, and xxxi. 10.) So far as Locke maintains this view, the difficulty about general propositions concerning real existence need not arise. A statement which affirmed of gold one of the qualities included in the complex idea of that substance, would not express merely an analysis of an idea in the mind, but would represent a relation of qualities in the existing thing from which the idea 'has been taken.' These qualities, as in the thing, doubtless would not be, as in us, feelings (or, as Locke should rather have said in more recent phraseology, possibilities of feeling), but powers to produce feeling, nor could any relation between these, as in the thing, be affirmed but such as had produced its copy or effect in actual experience. No coexistence of qualities could be truly affirmed, which had not been found; but, once found—being a coexistence of qualities and not simply a momentary coincidence of feelings—it could be affirmed as permanent in a general proposition. That a relation can be stated universally between ideas collected in the mind, no one denies, and if such collection 'is taken from a combination of simple ideas *existing together constantly in things*' (Book II. chap. xxxii. sec. 18), the statement will hold equally of such existence. Thus Locke contrasts mixed modes, which, for the most part, 'being actions which perish in the birth, are not capable of a lasting duration,' with 'substances, which are the actors; and wherein the simple ideas that make up the complex ideas designed by the name have a lasting union.' (Book III. chap. vi. sec. 42.)

91. In such a doctrine Locke, starting whence he did, could not remain at rest. We need not here repeat what has been said of it above in the consideration of his doctrine of substance. Taken strictly, it implies that 'real existence'

[1] Book II. chap. xxxi. sec. 12.

consists in a permanent relation of ideas, said to be of secondary qualities, to each other in dependence on other ideas, said to be of primary qualities. In other words, in order to constitute reality, it takes ideas out of that particularity in time and place, which is yet pronounced the condition of reality, to give them an 'abstract generality' which is fictitious, and then treats them as constituents of a system of which the 'invented' relations of cause and effect and of identity are the framework. In short, it brings reality wholly within the region of thought, distinguishing it from the system of complex ideas or nominal essences which constitute our knowledge, not as the unknown opposite of all possible thought, but only as the complete from the incomplete. To one who logically carried out this view, the ground of distinction between fact and fancy would have to be found in the relation between thought as 'objective,' or in the world, and thought as so far communicated to us. Here, however, it could scarcely be found by Locke, with whom 'thought' meant simply a faculty of the 'thinking thing,' called a 'soul,' which might ride in a coach with him from Oxford to London. (Book II. chap. xxiii. sec. 20.) Was the distinction then to disappear altogether?

But such real essence a creature of thought.

92. It is saved, though at the cost of abandoning the 'new way of ideas,' as it had been followed in the Second Book, by the transfer of real existence from the thing in which ideas are found, and whose qualities the complex of ideas in us, though inadequate, represents, to something called 'body,' necessarily unknown, because no ideas in us are in any way representative of it. To such an unknown body unknown qualities are supposed to belong under the designation 'real essence.' The subject of the nominal essence, just because its qualities, being matter of knowledge, are ideas in our minds, is a wholly different and a fictitious thing.

Hence another view of real essence as unknown qualities of unknown body.

93. This change of ground is of course not recognized by Locke himself. It is the perpetual crossing of the inconsistent doctrines that renders his 'immortal Third Book' a web of contradictions. As was said above, he constantly speaks as if the subject of the real essence were the same with that of the nominal, and never explicitly allows it to be different. The equivocation under which the difference is disguised lies in the use of the term 'body.' A 'particular body' is the subject both of the nominal and real essence

How Locke mixes up these two meanings in ambiguity about body.

'gold' But 'body,' as that in which 'ideas are found,' and in which they permanently coexist according to a natural law, is one thing; 'body,' as the abstraction of the unknown, is quite another. It is body in the former sense that is the real thing when nominal essence (the complex of ideas in us) is treated as representative, though inadequately so, of the real thing; it is body in the latter sense that is the real thing when this is treated as wholly outside possible consciousness, and its essence as wholly unrepresented by possible ideas. By a jumble of the two meanings Locke obtains an amphibious entity which is at once independent of relation to ideas, as is body in the latter sense, and a source of ideas representative of it, as is body in the former sense—which thus carries with it that opposition to the mental which is supposed necessary to the real, while yet it seems to manifest itself in ideas. Meanwhile a third conception of the real keeps thrusting itself upon the other two —the view, namely, that body in both senses is a fiction of thought, and that the mere present feeling is alone the real.

Body as 'parcel of matter' without essence.

94. Where Locke is insisting on the opposition between the real essence and any essence that can be known, the former is generally ascribed either to a 'particular being' or to a 'parcel of matter.' The passage which brings the opposition into the strongest relief is perhaps the following:—'I would ask any one, what is sufficient to make an essential difference in nature between any two particular beings, without any regard had to some abstract idea, which is looked upon as the essence and standard of a species? All such patterns and standards being quite laid aside, particular beings, considered barely in themselves, will be found to have all their qualities equally essential; and everything, in each individual, will be essential to it, or, which is more, nothing at all. For though it may be reasonable to ask whether obeying the magnet be essential to iron; yet I think it is very improper and insignificant to ask whether it be essential to the particular parcel of matter I cut my pen with, without considering it under the name *iron*, or as being of a certain species.' (Book III. chap. vi. sec. 5.)[1] Here, it will be seen, the exclusion of the abstract idea from reality carries with it the exclusion of that 'standard made

[1] To the same purpose is a passage in Book III. chap. x. sec. 19, towards the end.

by nature,' which according to the passages already quoted, is the 'thing itself' from which the abstract idea is taken, and from which, if correctly taken, it derives reality. This exclusion, again, means nothing else than the disappearance from 'nature' (which with Locke is interchangeable with 'reality') of all essential difference. There remain, however, as the 'real,' 'particular beings,' or 'individuals,' or 'parcels of matter.' In each of these, 'considered barely in itself, everything will be essential to it, or, which is more, nothing at all.'

In this sense body is the mere individuum.

95. We have already seen,[1] that if by a 'particular being' is meant the mere *individuum*, as it would be upon abstraction of all relations which according to Locke are fictitious, and constitute a community or generality, it certainly can have no essential qualities, since it has no qualities at all. It is a something which equals nothing. The notion of this bare *individuum* being the real is the 'protoplasm' of Locke's philosophy, to which, though he never quite recognized it himself, after the removal of a certain number of accretions we may always penetrate. It is so because his unacknowledged method of finding the real consisted in abstracting from the formed content of consciousness till he came to that which could not be got rid of. This is the momentarily present relation of subject and object, which, considered on the side of the object, gives the mere atom, and on the side of the subject, the mere 'it is felt.' Even in this ultimate abstraction the 'fiction of thought' still survives, for the atom is determined to its mere individuality by relation to other individuals, and the feeling is determined to the present moment or 'the now' by relation to other 'nows.'

Body as qualified by circumstances of time and place.

96. To this ultimate abstraction, however, Locke, though constantly on the road to it, never quite penetrates. He is farthest from it—indeed, as far from it as possible—where he is most acceptable to common sense, as in his ordinary doctrine of abstraction, where the real, from which the process of abstraction is supposed to begin, is already the individual in the fullness of its qualities, James and John, this man or this gold. He is nearest to it when the only qualification of the 'particular being,' which has to be removed by thought in order to its losing its reality and

[1] See above, paragraph 45.

becoming an abstract idea, is supposed to consist in 'circumstances of time and place.'

Such body Locke held to be subject of 'primary qualities': but are these compatible with particularity in time?

97. It is of these circumstances, as the constituents of the real, that he is thinking in the passage last quoted. As qualified by 'circumstances of place' the real is a parcel of matter, and under this designation Locke thought of it as a subject of 'primary qualities of body.'[1] These, indeed, as he enumerates them, may be shown to imply relations going far beyond that of simple distinctness between atoms, and thus to involve much more of the creative action of thought; but we need be the less concerned for this usurpation on the part of the particular being, since that which he illegitimately conveys to it as derived from 'circumstances of place,' he virtually takes away from it again by limitation in time. The 'particular being' has indeed on the one hand a real essence, consisting of certain primary qualities, but on the other it has no continued identity. It is only real as present to feeling at this or that time. The particular being of one moment is not the particular being of the next. Thus the primary qualities which are a real essence, i.e. an essence of a particular being, at one moment, are not its real essence at the next, because, while they as represented in the mind remain the same, the 'it,' the particular being is different. An *immutable* essence for that very reason cannot be real. The immutability can only lie in a relation between a certain abstract (i.e. unreal) idea and a certain sound. (Book III. chap. iii. sec. 19.) 'The real constitution of things,' on the other hand, 'begin and perish with them. All things that exist are liable to change.' (*Ibid.*) Locke, it is true (as is implied in the term *change*[2]) never quite drops the notion of there being a real identity in some unknown background, but this makes no difference in the bearing of his doctrine upon the possibility of 'real' knowledge. It only means that for an indefinite particularity of 'beings' there is substituted one 'being' under an indefinite peculiarity of forms. Though the reality of the thing *in itself* be immutable, yet its reality *for*

[1] According to Locke's ordinary usage of the terms, no distinction appears between 'matter' and 'body.' In Book III. chap. x. sec. 15, however, he distinguishes matter from body as the less determinate conception from the more. The one implies solidity merely, the other extension and figure also, so that we may talk of the 'matter of bodies,' but not of the 'body of matters.' But since solidity, according to Locke's definition, involves the other 'primary qualities,' this distinction does not avail him much.

[2] See above, paragraph 69.

us is in perpetual flux. 'In itself' it is a substance without an essence, a 'something we know not what' without any ideas to 'support;' a 'parcel of matter,' indeed, but one in which no quality is really essential, because its real essence, consisting in its momentary presentation to sense, changes with the moments.[1]

How Locke avoids this question.

98. We have previously noticed[2] Locke's pregnant remark, that 'things whose existence is in succession' do not admit of identity. (Book II. chap. xxvii. sec. 2.) So far, then, as the 'real,' in distinction from the 'abstract,' is constituted by particularity in time, or has its existence in succession, it excludes the relation of identity. 'It perishes in every moment that it begins.' Had Locke been master of this notion, instead of being irregularly mastered by it, he might have anticipated all that Hume had to say. As it is, even in passages such as those to which reference has just been made, where he follows its lead the farthest, he is still pulled up by inconsistent conceptions with which common sense, acting through common language, restrains the most adventurous philosophy. Thus, even from his illustration of the liability of all existence to change—'that which was grass to-day is to-morrow the flesh of a sheep, and within a few days after will become part of a man'[3]—we find that, just as he does not pursue the individualization of the real in space so far but that it still remains 'a constitution of parts,' so he does not pursue it in time so far but that a coexistence of real elements over a certain duration is possible. To a more thorough analysis, indeed, there is no alternative between finding reality in relations of thought, which, because relations of thought, are not in time and therefore are immutable, and submitting it to such subdivision of time as excludes all real coexistence because what is real, as present, at one moment is unreal, as past, at the next. This alternative could not present itself in its clearness to Locke, because, according to his method of interrogating consciousness, he inevitably found in its supposed beginning, which he identified with the real, those products of thought which he opposed to the real, and thus read into the simple feeling of the moment that which, if it were the simple feeling of the moment, it

[1] Cf. Book III. chap. vi. sec. 4: 'Take but away the abstract ideas by which we sort individuals and rank them under common names, and then the thought of anything essential to any of them instantly vanishes,' &c.

[2] See above, paragraph 75.

[3] Book III. chap. iii. sec. 10.

could not contain. Thus throughout the Second Book of the Essay the simple idea is supposed to represent either as copy or as effect a permanent reality, whether body or mind: and in the later books, even where the *representation* of such reality in knowledge comes in question, its existence as constituted by 'primary qualities of body' is throughout assumed, though general propositions with regard to it are declared impossible. It is a feeling referred to body, or, in the language of subsequent psychology, a feeling of the *outward* sense,[1] that Locke means by an 'actual present sensation,' and it is properly in virtue of this reference that such sensation is supposed to be, or to report, the real.

Body and its qualities supposed to be outside consciousness.

99. According to the doctrine of primary qualities, as originally stated, the antithesis lies between body as it is in itself and body as it is for us, not between body as it is for us in 'actual sensation,' and body as it is for us according to 'ideas in the mind.' The primary qualities 'are in bodies whether we perceive them or no.' (Book II. chap. viii. sec. 23.) As he puts it elsewhere (Book II. chap. xxxi. sec. 2), it is just because 'solidity and extension and the termination of it, figure, with motion and rest, whereof we have the ideas, would be really in the world as they are whether there were any sensible being to perceive them or no,' that they are to be looked on as the *real* modifications of matter. A change in them, unlike one in the secondary qualities, or such as is relative to sense, is a *real* alteration *in body*. 'Pound an almond, and the clear white colour will be altered into a dirty one, and the sweet taste into an oily one. What alteration can the beating of the pestle make in any body, but an alteration of the texture of it?' (Book II. chap. viii. sec. 20.) It is implied then in the notion of the real as body that it should be outside consciousness. It is that which seems to remain when everything belonging to consciousness has been thought

[1] For the germs of the distinction between outer and inner sense, see Locke's Essay, Book II. chap. i. sec. 14: 'This source of ideas (the perception of the operations of the mind) every man has wholly in himself; and though it be not sense, as having nothing to do with external objects, yet it is very like it, and might properly enough be called internal sense.' For the notion of outer sense Cf. Book II. chap. ix. sec. 6, where he is distinguishing the ideas of hunger and warmth, which he supposes children to receive in the womb from the 'innate principles which some contend for.' 'These (the ideas of hunger and warmth) being the effects of sensation, are only from some affections of the body which happen to them there, and so depend on something exterior to the mind, not otherwise differing in their manner of production from other ideas derived from sense, but only in the precedency of time.'

away. Yet it is brought within consciousness again by the supposition that it has qualities which copy themselves in our ideas and are 'the exciting causes of all our various sensations from bodies.' (Book II. chap. xxxi. sec. 3.) Again, however, the antithesis between the real and consciousness prevails, and the qualities of matter or body having been brought within the latter, are opposed to a 'substance of body'—otherwise spoken of as 'the nature, cause, or manner of producing the ideas of primary qualities'—which remains outside it, unknown and unknowable. (Book II. chap. xxiii. sec. 30, &c.)

How can primary qualities be outside consciousness, and yet knowable?

100. The doctrine of primary qualities was naturally the one upon which the criticism of Berkeley and Hume first fastened, as the most obvious aberration from the 'new way of ideas.' That the very notion of the senses as 'reporting' anything, under secondary no less than under primary qualities, implies the presence of 'fictions of thought' in the primitive consciousness, may become clear upon analysis; but it lies on the surface and is avowed by Locke himself (Book II. chap. viii. secs. 2, 7), that the conception of primary qualities is only possible upon distinction being made between ideas as in our minds, and the 'nature of things existing without us,' which cannot be given in the simple feeling itself. This admitted, the distinction might either be traced to the presence within intelligent consciousness of another factor than simple ideas, or be accounted for as a gradual 'invention of the mind.' In neither way, however, could Locke regard it and yet retain his distinction between fact and fancy, as resting upon that between the nature of things and the mind of man. The way of escape lay in a figure of speech, the figure of the wax or the mirror. 'The ideas of primary qualities are resemblances of them.' (Book II. chap. viii. sec. 15.) These qualities then may be treated, according to occasion, either as primitive data of consciousness, or as the essence of that which is the unknown opposite of consciousness—in the latter way when the antithesis between nature and mind is in view, in the former when nature has yet to be represented as knowable.

Locke answers that they copy themselves in

101. How, asked Berkeley, can an idea be like anything that is not an idea? Put the question in its proper strength —How can an idea be like that of which the sole and simple determination is just that it is not an idea (and such with

ideas—Berkeley's rejoinder. Locke gets out of the difficulty by his doctrine of solidity.

Locke is body 'in itself' or as the real)—and it is clearly unanswerable. The process by which Locke was prevented from putting it to himself is not difficult to trace. 'Body' and 'the solid' are with him virtually convertible terms. Each indifferently holds the place of the substance, of which the primary qualities are so many determinations.[1] It is true that where solidity has to be defined, it is defined as an attribute of body, but conversely body itself is treated as a 'texture of solid parts,' i.e. as a mode of the solid. Body, in short, so soon as thought of, resolves itself into a relation of bodies, and the solid into a relation of solids, but Locke, by a shuffle of the two terms—representing body as a relation between solids and the solid as a relation between bodies—gains the appearance of explaining each in turn by relation to a simpler idea. Body, as the unknown, is revealed to us by the idea of solidity, which sense conveys to us; while solidity is explained by reference to the idea of body. The idea of solidity, we are told, is a simple idea which comes into the mind solely by the sense of touch. (Book II. chap. iii. sec. 1.) But no sooner has he thus identified it with an immediate feeling than, in disregard of his own doctrine, that 'an idea which has no composition' is undefinable,[2] he converts it into a theory of the cause of that feeling. 'It arises from the resistance which we find in body to the entrance of any other body into the place it possesses till it has left it;' and he at once proceeds to treat it as the consciousness of such resistance. 'Whether we move or rest, in what posture soever we are, we always feel something under us that supports us, and hinders our farther sinking downwards: and the bodies which we daily handle make us perceive that whilst they remain between them, they do by an insurmountable force hinder the approach of the parts of our hands that press them. That which then hinders the approach of two bodies, when they are moving one towards another, I call solidity.' (Book II. chap. iv. sec 1.)

in which he equivocates between body

102. Now 'body' in this theory is by no means outside consciousness. It is emphatically 'in the mind,' a 'nominal essence,' determined by the relation which the theory assigns

[1] See Book II. chap. viii. sec. 23: The primary 'qualities that are in bodies, are the bulk, figure, number, situation, and motion or rest, *of their solid parts*.' Cf. Book II. chap. xiii. sec. 11: 'Solidity is so inseparable an idea from body, that upon that depends its filling of space, its contact, impulse, and communication of motion upon impulse.'

[2] See Book III. chap. iv. sec. 7.

to it, and which, like every relation according to Locke, is a 'thing of the mind.' This relation is that of outwardness to other bodies, and among these to the sensitive body through which we receive 'ideas of sensation'—a body which, on its side, as determined by the relation, has its essence from the mind. It is, then, not as the unknown opposite of the mind, but as determined by an intelligible relation which the mind constitutes, and of which the members are each 'nominal essences,' that body is outward to the sensitive subject. But to Locke, substituting for body as a nominal essence body as the unknown thing in itself, and identifying the sensitive subject with the mind, outwardness in the above sense—an outwardness constituted by the mind—becomes outwardness *to* the mind of an unknown opposite of the mind. Solidity, then, and the properties which its definition involves (and it involves all the 'primary qualities'), become something wholly alien to the mind, which 'would exist without any sensible being to perceive them.' As such, they do duty as a real essence, when the opposition of this to everything in the mind has to be asserted. Yet must they be in some sort ideas, for of these alone (as Locke fully admits) can we think and speak; and if ideas, in the mind. How is this contradiction to be overcome? By the notion that though not in or of the mind, they yet copy themselves upon it in virtue of an impulse in body, correlative to that resistance of which touch conveys the idea. (Book II. chap. viii. sec. 11).[1] This explanation, however, is derived from the equivocation between the two meanings of mind and body respectively. The problem to be explained is the relation between the mind and that which is only qualified as the negation of mind; and the explanation is found in a relation, only existing for the mind, between a sensitive and a non-sensitive body.

as unknown opposite of mind and body as a 'nominal essence

103. The case then stands as follows. All that Locke says of body as the real thing-in-itself, and of its qualities as the essence of such thing, comes according to his own showing of an action of the mind which he reckons the source of fictions. 'Body in itself' is a substratum of ideas which the mind 'accustoms itself to suppose.' It perpetually recedes, as what was at first a substance becomes in turn a complex of qualities for which a more remote substratum has to be

Rationale of these contradictions.

[1] Cf. also the passage from Book II. chap. xiii. sec. 11, quoted above, p. 82, note 1.

supposed—a 'substance of body,' a productive cause of matter. But the substance, however remote, is determined by the qualities to which it is correlative, as the cause by its effects; and every one of these—whether the most primary, solidity, or those which 'the mind finds inseparable from every particle of matter,' i.e. from the 'solid parts of a body,'[1] —as defined by Locke, is a relation such as the mind, 'bringing one thing to and setting it by another' (Book II. chap. xxv. sec. 1), can alone constitute. To Locke, however, overcome by the necessity of intelligence, as gradually developing itself in each of us, to regard the intelligible world as there before it is known, the real must be something which would be what it is if thought were not. Strictly taken, this must mean that it is that of which nothing can be said, and some expression must be found by means of which it may do double duty as at once apart from consciousness and in it. This is done by converting the primary qualities of body, though obviously complex ideas of relation, into simple feelings of touch,[2] and supposing the subject of this sensation to be related to its object as wax to the seal. If we suppose this relation, again, which is really within the mind and constituted by it, to be one between the mind itself, as passive, and the real, we obtain a 'real' which exists apart from the mind, yet copies itself upon it. The mind, then, so far as it takes such a copy, becomes an 'outer sense,' as to which it may be conveniently forgotten that it is a mode of mind at all. Thus every modification of it, as an 'actual present sensation,' comes to be opposed to every idea of memory or imagination, as that which is not of the mind to that which is; though there is no assignable difference between one and the other, except an indefinite one in degree of vivacity, that is not derived from the action of the mind in referring the one to an object, constituted by itself, to which it does not refer the other.

What knowledge can feeling, even as referred to a 'solid' body, convey?

104. Let us now consider whether by this reference to body, feeling becomes any the more a source of general knowledge concerning matters of fact. As we have seen, if we

[1] Cf. Book II. chap. viii. sec. 9. The primary qualities of body are 'such as sense constantly finds in every particle of matter, which has bulk enough to be perceived, and the mind finds inseparable from every particle of matter, though less than to make itself singly be perceived by our senses.'

[2] I write advisedly 'touch' only, not 'sight and touch,' because, though Locke (Book II. chap. v.) speaks of the ideas of extension, figure, motion, and rest of bodies, as received both by sight and touch, these are all involved in the previous definition of solidity, of which the idea is ascribed to touch only.

identify the real with feeling simply, its distinction from 'bare vision' disappears. This difficulty it is sought to overcome by distinguishing feeling as merely in the mind from actually present sensation. But on reflection we find that sensation after all is feeling, and that one feeling is as much present as another, though present only to become at the next moment past, and thus, if it is the presence that is the condition of reality, unreal. The distinction then must lie in the *actuality* of the sensation. But does not this actuality mean simply derivation from the real, i.e. derivation from the idea which has to be derived from it? If, in the spirit of Locke, we answer, 'No, it means that the feeling belongs to the outer sense'; the rejoinder will be that this means either that it is a feeling of touch—and what should give the feeling of touch this singular privilege over other feelings of not being in the mind while they are in it?—or that it is a feeling referred to body, which still implies the presupposition of the real, only under the special relations of resistance and impulse. The latter alternative is the one which Locke virtually adopts, and in adopting it he makes the actuality, by which sensation is distinguished from 'feelings in the mind,' itself a creation of the mind. But though it is by an intellectual interpretation of the feeling of touch, not by the feeling itself, that there is given that idea of body, by reference to which actual sensation is distinguished from the mere idea, still with Locke the feeling of touch is necessary to the interpretation. Thus, supposing his notion to be carried out consistently, the actual present sensation, as reporting the real, must either be a feeling of touch, or, if of another sort, e.g., sight or hearing, must be referable to an object of touch. In other words, the real will exist for us so long only as it is touched, and ideas in us will constitute a real essence so long only as they may be referred to an object now touched. Let the object cease to be touched, and the ideas become a nominal essence in the mind, the knowledge which they constitute ceases to be real, and the proposition which expresses it ceases to concern matter of fact. Truth as to matters of fact or bodies, then, must be confined to singular propositions such as 'this is touched now,' 'that was touched then;' 'what is touched now is bitter,' 'what was then touched was red.'[1]

[1] Thus the conviction that an object seen is not 'bare fancy,' which is gained by 'putting the hand to it' (Book IV. chap. xi. sec. 17), as it conveys the idea

Only the knowledge that something is, not *what* it is.

105. All that is gained, then, by the conversion of the feeling of touch, pure and simple, into the idea of a body touched, is the supposition that *there is* a real existence which does not come and go with the sensations. As to *what* this existence is, as to its real essence, we can have no knowledge but such as is given in a present sensation.[1] Any essence of it, otherwise known, could only be a nominal essence, a relation of ideas in our minds: it would lack the condition in virtue of which alone a datum of consciousness can claim to be representative of reality, that of being an impression made by a body now operating upon us. (Book III. chap. v. sec. 2, and Book IV. chap. xi. sec. 1.) The memory of such impression, however faithful, will still only report a *past* reality. It will itself be merely 'an idea in the mind.' Neither it nor its relation to any present sensation result from the immediate impact of body, and in consequence neither 'really exists.' All that can be known, then, of the real, in other words, the whole real essence of body, as it is for us, reduces itself to that which can at any moment be 'revealed' in a single sensation apart from all relation to past sensations; and this, as we have seen, is nothing at all.

How it is that the real essence of things, according to Locke, perishes with them, yet is immutable.

106. Thus that reduction of reality to that of which nothing can be said, which follows from its identification with particularity in time, follows equally from its identification with the resistance of body, or (which comes to the same) from the notion of an 'outer sense' being its organ; since it is only that which *now* resists, not a general possibility of resistance nor a relation between the resistances of different times, that can be regarded as outside the mind. In Locke's language, it is only a particular parcel of matter that can be so regarded. Of such a parcel, as he rightly says, it is absurd to ask what is its essence, for it can have none at all. (See above, paragraph 94.) As real, it has no quality save that of being a body or of being now touched—a quality, which as all things real have it and have none other, cannot be a *differentia* of it. When we consider that this quality may be

of solidity, is properly, according to Locke's doctrine, not one among other 'confirmations of the testimony of the senses,' but the source of all such testimony, as a testimony to the real, i.e. to body. See above, paragraph 62.

[1] Cf. Book III. chap. vi. sec. 6: 'As to the real essences of substances, we only suppose their being, without precisely knowing what they are.' The appearance of the qualification 'precisely,' as we shall see below, marks an oscillation from the view, according to which 'real essence' is the negation of the knowable to the view according to which our knowledge of it is merely inadequate.

regarded equally as immutable and as changing from moment to moment, we shall see the ground of Locke's contradiction of himself in speaking of the real thing sometimes as indestructible, sometimes as in continual dissolution. 'The real constitutions of things begin and perish with them.' (Book III. chap. iii. sec. 19.) That is, the thing at one moment makes an impact on the sensitive tablet—in the fact that it does so lie at once its existence and its essence—but the next moment the impact is over, and with it thing and essence, *as real*, have disappeared. Another impact, and thus another thing, has taken its place. But of this the real essence is just the same as that of the previous thing, namely, that it may be touched, or is solid, or a body, or a parcel of matter; nor can this essence be really lost, since than it there is no other reality, all difference of essence, as Locke expressly says,[1] being constituted by abstract ideas and the work of the mind. It follows that *real* change is impossible. A parcel of matter at one time is a parcel of matter at all times. Thus we have only to forget that the relation of continuity between the parcels, not being an idea caused by impact, should properly fall to the unreal—though only on the same principle as should that of distinctness between the times—and we find the real in a continuity of matter, unchangeable because it has no qualities to change. It may seem strange that when this notion of the formless continuity of the real being gets the better of Locke, a man should be the real being which he takes as his instance. 'Nothing I have is essential to me. An accident or disease may very much alter my colour or shape; a fever or fall may take away my reason or memory, or both; and an apoplexy leave neither sense nor understanding, no, nor life.' (Book III. chap. vi. sec. 4.) But as the sequel shows, the man or the 'I' is here considered simply as 'a particular corporeal being,' i.e. as the 'parcel of matter' which alone (according to the doctrine of reality now in view) can be the real in man, and upon which all qualities are 'superinductions of the mind.'[2]

107. We may now discern the precise point where the

Only about qualities of

[1] Book III. chap. vi. sec. 4: 'Take but away the abstract ideas by which we sort individuals, and then the thought of anything essential to any of them instantly vanishes.'

[2] See a few lines below the passage quoted: 'So that if it be asked, whether it be essential to me, or any other particular corporeal being, to have reason? I say, no; no more than it is essential to this white thing I write on to have words in it.'

matter, as distinct from matter itself, that Locke feels any difficulty.

qualm as to clothing reality with such superinductions commonly returns upon Locke. The conversion of feeling into body felt and of the particular time of the feeling into an individuality of the body, and, further, the fusion of the individual bodies, manifold as the times of sensation, into one continued body, he passes without scruple. So long as these are all the traces of mental fiction which 'matter,' or 'body,' or 'nature' bears upon it, he regards it undoubtingly as the pure 'privation' of whatever belongs to the mind. But so soon as cognisable qualities, forming an essence, come to be ascribed to body, the reflection arises that these qualities are on our side ideas, and that so far as they are permanent or continuous they are not ideas of the sort which can alone represent body as the 'real' opposite of mind; they are not the result of momentary impact; they are not 'actually present sensations.' Suppose them, however, to have no permanence —suppose their reality to be confined to the fleeting 'now' —and they are no qualities, no essence, at all. There is then for us no *real* essence of body or nature; what we call so is a creation of the mind.

These, as knowable, must be our ideas, and therefore not a 'real essence.'

108. This implies the degradation of the 'primary qualities of body' from the position which they hold in the Second Book of the Essay, as the real, *par excellence*, to that of a nominal essence. In the Second Book, just as the complex of ideas, received and to be received from a substance, is taken for the real thing without disturbance from the antithesis between reality and 'ideas in the mind,' so the primary qualities of body are taken not only as real, but as the sources of all other reality. Body, the real thing, copying itself upon the mind in an idea of sensation (that of solidity), carries with it from reality into the mind those qualities which 'the mind finds inseparable from it,' with all their modes. 'A piece of manna of a sensible bulk is able to produce in us the idea of a round or square figure, and, by being removed from one place to another, the idea of motion. This idea of motion represents it, as it really is in the manna, moving; a circle or square are the same, whether in idea or existence, in the mind or in the manna; and this both motion and figure are really in the manna, whether we take notice of them or no.' (Book II. chap. viii. sec. 18.) To the unsophisticated man, taking for granted that the 'sensible bulk' of the manna is a 'real essence,' this statement will raise no diffi-

culties. But when he has learnt from Locke himself that the 'sensible bulk,' so far as we can think and speak of it, must consist in the ideas which it is said to produce, the question as to the real existence of these must arise. It turns out that they 'really exist,' so far as they represent the impact of a body copying itself in actually present sensation, and that from their reality, accordingly, must be excluded all qualities that accrue to the present sensation from its relation to the past. Can the 'primary qualities' escape this exclusion?

Are the 'primary qualities then, a 'nominal essence'?

109. To obtain a direct and compendious answer to this question from Locke's own mouth is not easy, owing to the want of adjustment between the several passages where he treats of the primary qualities. They are originally enumerated as the 'bulk, figure, number, situation, and motion or rest of the solid parts of bodies' (Book II. chap. viii. sec. 23), and, as we have seen, are treated as all involved in that idea of solidity which is given in the sensation of touch. We have no further account of them till we come to the chapters on 'simple modes of space and duration' (Book II. chaps. xiii. &c.), which are introdued by the remark, that in the previous part of the book simple ideas have been treated 'rather in the way that they come into the mind than as distinguished from others more compounded.' As the simple idea, according to Locke, is that which comes first into the mind, the two ways of treatment ought to coincide; but there follows an explanation of the simple modes in question, of which to a critical reader the plain result is that the idea of body, which, according to the imaginary theory of 'the way that it came into the mind' is simple and equivalent to the sensation of touch, turns out to be a complex of relations of which the simplest is called space.

According to Locke's account they are relations, and thus inventions of the mind.

110. To know what space itself is, 'we are sent to our senses' of sight and touch. It is 'as needless to go to prove that men perceive by their sight a distance between bodies of different colours, or between the parts of the same body, as that they see colours themselves; nor is it less obvious that they can do so in the dark by feeling and touch.' (Book II. chap. xiii. sec. 2.) Space being thus explained by reference to distance, and distance *between bodies*, it might be supposed that distance and body were simpler ideas. In the next paragraph, however, distance is itself explained to

be a mode of space. It is 'space considered barely in length between any two beings,' and is distinguished (*a*) from 'capacity' or 'space considered in length, breadth, and thickness;' (*b*) from 'figure, which is nothing but the relation which the parts of the termination of extension, or circumscribed space, have among themselves;' (*c*) from 'place, which is the relation of distance between anything and any two or more points which are considered as keeping the same distance one with another, and so as at rest.' It is then shown at large (Book II. chap. xiii. sec. 11), as against the Cartesians, that extension, which is 'space in whatsoever manner considered,' is a 'distinct idea from body.' The ground of the distinction plainly lies in the greater complexity of the idea of body. Throughout the definition just given 'space' is presupposed as the simpler idea of which capacity, figure, and place are severally modifications; and these again, as 'primary qualities,' though with a slight difference of designation,[1] are not only all declared inseparable from body, but are involved in it under a further modification as '*qualities of its solid parts*,' i.e., of parts so related to each other that each will change its place sooner than admit another into it. (Book II. chap. iv. sec. 2, and chap. viii. sec. 23.) Yet, though body is thus a complex of relations—all, according to Locke's doctrine of relation, inventions of the mind—and though it must be proportionately remote from the simple idea which 'comes first into the mind,' yet, on the other hand, it is in body, as an object previously given, that these relations are said to be found, and found by the senses. (Book II. chap. xiii. secs. 2, 27.)[2]

Body is the complex in which they are found.

111. It will readily be seen that 'body' here is a mode of the idea of substance, and, like it,[3] appears in two inconsistent positions as at once the beginning and the end of the process of knowledge—as on the one hand that in which ideas are found and from which they are abstracted, and on the other hand that which results from their complication. As the attempt either to treat particular qualities as given and substance as an abstraction gradually made, or conversely to treat the 'thing' as given, and relations as gradually superinduced, necessarily fails for the simple reason

[1] In the enumeration of primary qualities, 'capacity' is represented by 'bulk,' 'place' by 'situation.'

[2] In the second of the passages referred to, it will be seen that 'matter' is used interchangeably with 'body.'

[3] See above, paragraph 39.

that substance and relations each presuppose the other, so body presupposes the primary qualities as so many relations which form its essence or make it what it is, while these again presuppose body as the matter which they determine. It is because Locke substitutes for this intellectual order of mutual presupposition a succession of sensations in time that he finds himself in the confusion we have noticed—now giving the priority to sensations in which the idea of body is supposed to be conveyed, and from it deriving the ideas of the primary qualities, now giving it to these ideas themselves, and deriving the idea of body from their complication. This is just such a contradiction as it would be to put to-day before yesterday. *We* may escape it by the consideration that in the case before us it is not a succession of sensations in time that we have to do with at all; that 'the real' is an intellectual order, or mind, in which every element, being correlative to every other, at once presupposes and is presupposed by every other; but that this order communicates itself to us piecemeal, in a process of which the first condition on our part is the conception that there *is* an order, or something related to something else; and that thus the conception of qualified substance, which in its definite articulation is the end of all our knowledge, is yet in another form, that may be called indifferently either abstract or confused,[1] its beginning. This way of escape, however, was not open to Locke, because with him it was the condition of reality in the idea of the body and its qualities that they should be 'actually present sensations.' The priority then of body to the relations of extension, distance, &c., as of that in which these relations are found, must, if body and extension are to be more than nominal essences, be a priority of sensations in time. But, on the other hand, the priority of the idea of space to the ideas of its several modes, and of these again to the idea of body, as of the simpler to the more complex, must no less than the other, if the ideas in question are to be real, be one in time. Locke's contradiction, then, is that of supposing that of two sensations each is actually present, of two impacts on the sensitive tablet each is actually made, before the other.

Do we derive the idea of body from primary qualities, or the primary qualities from idea of body?

112. From such a contradiction, even though he was not

[1] 'Indifferently either abstract or confused,' because of the conception that is most confused the least can be said; and it is thus most abstract.

Mathematical ideas, though ideas of 'primary qualities of body,' have 'barely an ideal existence.'

distinctly aware of it, he could not but seek a way of escape. From his point of view two ways might at first sight seem to be open—the priority in sensitive experience, and with it reality, might be assigned exclusively either to the idea of body or to that of space. To whichever of the two it is assigned, the other must become a nominal essence. If it is the idea of body that is conveyed to the mind directly from without through sensation, then it must be by a process in the mind that the spatial relations are abstracted from it; and conversely, if it is the latter that are given in sensation, it must be by a mental operation of compounding that the idea of body is obtained from them. Now, according to Locke's fundamental notion, that the reality of an idea depends upon its being in consciousness a copy *through impact* of that which is not in consciousness, any attempt to retain it in the idea of space while sacrificing it in that of body would be obviously self-destructive. Nor, however we might re-write his account of the relations of space as 'found in bodies,' could we avoid speaking of them as relations of some sort; and if relations, then derived from the 'mind's carrying its view from one thing to another,' and not 'actually present sensations.' We shall not, then, be surprised to find Locke tending to the other alternative, and gradually forgetting his assertion that 'a circle or a square are the same whether in idea or in existence,' and his elaborate maintenance of the 'real existence' of a vacuum, i.e., extension without body. (Book II. chap. xiii. secs. 21 and the following, and xvii. 4.) In the Fourth Book it is body alone that has real existence, an existence revealed by actually present sensation, while all mathematical ideas, the ideas of the circle and the square, have 'barely an ideal existence' (Book IV. chap. iv. sec. 6); and this means nothing else than the reduction of the primary qualities of body to a nominal essence. Our ideas of them are general (Book IV. chap. iii. sec. 24), or merely in the mind. 'There is no individual parcel of matter, to which any of these qualities are so annexed as to be essential to it or inseparable from it.' (Book III. chap. vi. sec. 6.) How should there be, when the 'individual parcel' means that which copies itself by impact in the present sensation, while the qualities in question are relations which cannot be so copied? Yet, except as attaching to such a parcel, they have no 'real existence;' and,

conversely, the 'body,' from which they *are* inseparable, not being an individual parcel of matter in the above sense, must itself be unreal and belong merely to the mind. The 'body' which is real has for us no qualities, and that reference to it of the 'actually present sensation' by which such sensation is distinguished from other feeling, is a reference to something of which nothing can be said. It is a reference which cannot be stated in any proposition *really* true; and the difference which it constitutes between 'bare vision' and the feeling to which reality corresponds, must be either itself unreal or unintelligible.

Summary view of Locke's difficulties in regard to the real.

113. We have now pursued the antithesis between reality and the work of the mind along all the lines which Locke indicates, and find that it everywhere eludes us. The distinction, which only appeared incidentally in the doctrine of substance, between 'the being and the idea thereof'—between substance as 'found' and substance as that which 'we accustom ourselves to suppose'—becomes definite and explicit as that between real and nominal essence, but it does so only that the essence, which is merely real, may disappear. Whether we suppose it the quality of a mere sensation, as such, or of mere body, as such, we find that we are unawares defining it by relations which are themselves the work of the mind, and that after abstraction of these nothing remains to give the antithesis to the work of the mind any meaning. Meanwhile the attitude of thought, when it has cleared the antithesis of disguise, but has not yet found that each of the opposites derives itself from thought as much as the other, is so awkward and painful that an instinctive reluctance to make the clearance is not to be wondered at. Over against the world of knowledge, which is the work of the mind, stands a real world of which we can say nothing but that it is there, that it makes us aware of its presence in every sensation, while our interpretation of what it is, the system of relations which we read into it, is our own invention. The interpretation is not even to be called a shadow, for a shadow, however dim, still reflects the reality; it is an arbitrary fiction, and a fiction of which the possibility is as unaccountable as the inducement to make it. It is commonly presented as consisting in abstraction from the concrete. But the concrete, just so far as concrete, i.e., a complex world of relations, cannot be the

real if the separation of the real from the work of the mind is to be maintained. It must itself be the work of the compounding mind, which must be supposed again in 'abstraction' to decompose what it has previously compounded. Now, it is of the essence of the doctrine in question that it denies all power of origination to the mind except in the way of compounding and abstracting given impressions. Its supposition is, that whatever precedes the work of composition and abstraction must be real[1] because the mind passively receives it: a supposition which, if the mind could originate, would not hold. How, then, does it come to pass that a 'nominal essence,' consisting of definite qualities, is constructed by a mind, which originates nothing, out of a 'real' matter, which, apart from such construction, has no qualities at all? And why, granted the construction, should the mind in 'abstraction' go through the Penelopean exercise of perpetually unweaving the web which it has just woven?

Why they do not trouble him more.

114. It is Hume's more logical version of Locke's doctrine that first forces these questions to the front. In Locke himself they are kept back by inconsistencies, which we have already dwelt upon. For the real, absolutely void of intelligible qualities, because these are relative to the mind, he is perpetually substituting a real constituted by such qualities, only with a complexity which we cannot exhaust. By so doing, though at the cost of sacrificing the opposition between the real and the mental, he avoids the necessity of admitting that the system of the sciences is a mere language, well—or ill—constructed, but unaccountably and without reference to things. Finally, he so far forgets the opposition altogether as to find the reality of 'moral and mathematical' knowledge in their 'bare ideality' itself. (Book IV. chap. iv. sec. 6, &c.) Thus with him the divorce between knowledge and reality is never complete, and sometimes they appear in perfect fusion. A consideration of his doctrine of propositions will show finally how the case between them stands, as he left it.

They reappear in his doctrine of propositions.

115. In the Fourth Book of the Essay the same ground has to be thrice traversed under the several titles of 'knowledge,' 'truth,' and 'propositions.' Knowledge being the

[1] 'Simple ideas, since the mind can by no means make them to itself, must necessarily be the product of things operating on the mind.' (Book IV. chap. v. sec. 4.)

perception of agreement or disagreement between ideas, the proposition is the putting together or separation of words, as the signs of ideas, in affirmative or negative sentences (Book VI. chap. v. sec. 5), and truth—the expression of certainty [1]—consists in the correspondence between the conjunction or separation of the signs and the agreement or disagreement of the ideas. (Book IV. chap. v. sec. 2.) Thus, the question between the real and the mental affects all these. Does this or that perception of agreement between ideas represent an agreement in real existence? Is its certainty a real certainty? Does such or such a proposition, being a correct expression of an agreement between ideas, also through this express an agreement between things? Is its truth real, or merely verbal?

The knowledge expressed by a proposition, though certain, may not be real,

116. To answer these questions, according to Locke, we must consider whether the knowledge, or the proposition which expresses it, concerns substances, i.e., 'the co-existence of ideas in nature,' on the one hand; or, on the other, either the properties of a mathematical figure or 'moral ideas.' If it is of the latter sort, the agreement of the ideas in the mind is itself their agreement in reality, since the ideas themselves are archetypes. (Book IV. chap. iv. secs. 6, 7.) It is only when the ideas are ectypes, as is the case when the proposition concerns substances, that the doubt arises whether the agreement between them represents an agreement in reality. The distinction made here virtually corresponds to that which appears in the chapters on the reality and adequacy of ideas in the Second Book, and again in those on 'names' in the Third. There the 'complex ideas of modes and relation' are pronounced necessarily real adequate and true, because, 'being themselves archetypes, they cannot differ from their archetypes.' (Book II. chap. xxx. sec. 4.) [2] With them are contrasted simple ideas and complex ideas of substances, which are alike ectypes, but

[1] All knowledge is certain according to Locke (Cf. VI. chap. vi. sec. 13, 'certainty is requisite to knowledge'), though the knowledge must be expressed before the term 'certainty' is naturally applied to it. (Book IV. chap. vi. sec. 3.) 'Certainty of knowledge' is thus a pleonastic phrase, which only seems not to be so because we conceive knowledge to have a relation to things which Locke's definition denies it, and by 'certainty,' in distinction from this, understand its relation to the subject.

'Certainty of truth' is, in like manner, a pleonastic phrase, there being no difference between the definition of it (Book IV. chap. vi. sec. 3) and that of 'truth' simply, given in Book IV. chap. v. sec. 2.

[2] Cf. Book II. chap. xxxi. sec. 3, and xxxii. sec. 17.

with this difference from each other, that the simple ideas cannot but be faithful copies of their archetypes, while the ideas of substances cannot but be otherwise. (Book II. chap. xxxi. secs. 2, 11, &c.) Thus, 'the names of simple ideas and substances, with the abstract ideas in the mind which they immediately signify, intimate also some real existence, from which was derived their original pattern. But the names of mixed modes terminate in the idea that is in the mind.' (Book III. chap. iv. sec. 2.) 'The names of simple ideas and modes,' it is added, 'signify always the real as well as nominal essence of their species'—a statement which, if it is to express Locke's doctrine strictly, must be confined to names of simple ideas, while in respect of modes it should run, that 'the nominal essence which the names of these signify is itself the real.'

when the knowledge concerns substances.

117. But though the distinction between different kinds of knowledge in regard to reality cannot but rest on the same principle as that drawn between different kinds of ideas in the same regard, it is to be noticed that in the doctrine of the Fourth Book 'knowledge concerning substances,' in contrast with that in which 'our thoughts terminate in the abstract ideas,' has by itself to cover the ground which, in the Second and Third Book, simple ideas and complex ideas of substances cover together. This is to be explained by the observation, already set forth at large,[1] that the simple idea has in Locke's Fourth Book become explicitly what in the previous books it was implicitly, not a feeling proper, but the conscious reference of a feeling to a thing or substance. Only because it is thus converted, as we have seen, can it constitute the beginning of a knowledge which is not a simple idea but a conscious relation between ideas, or have (what yet it must have if it can be expressed in a proposition) that capacity of being true or false, which implies 'the reference by the mind of an idea to something extraneous to it.' (Book II. chap. xxxii. sec. 4.) Thus, what is said of the 'simple idea' in the Second and Third Books, is in the Fourth transferred to one form of knowledge concerning substances, to that, namely, which consists in 'particular experiment and observation,' and is expressed in singular propositions, such as 'this is yellow,' 'this gold is now solved in aqua regia.' Such knowledge cannot but be real, the

[1] See above, paragraph 25.

proposition which expresses it cannot but have *real* certainty, because it is the effect of a 'body actually operating upon us' (Book IV. chap. xi. sec. 1), just as the simple idea is an ectype directly made by an archetype. It is otherwise with complex ideas of substances and with general knowledge or propositions about them. A group of ideas, each of which, when first produced by a 'body,' has been real, when retained in the mind as representing the body, becomes unreal. The complex idea of gold is only a nominal essence or the signification of a name; the qualities which compose it are merely ideas in the mind, and that general truth which consists in a correct statement of the relation between one of them and another or the whole—e.g., 'gold is soluble in aqua regia'—holds merely for the mind;[1] but it is not therefore to be classed with those other mental truths, which constitute mathematical and moral knowledge, and which, just because 'merely ideal,' are therefore real. Its merely mental character renders it in Locke's language a 'trifling proposition,' but does not therefore save it from being *really* untrue. It is a 'trifling proposition,' for, unless solubility in aqua regia is included in the complex idea which the sound 'gold' stands for, the proposition which asserts it of gold is not certain, not a truth at all. If it is so included, then the proposition is but 'playing with sounds.' It may serve to remind an opponent of a definition which he has made but is forgetting, but 'carries no knowledge with it but of the signification of a word, however certain it be.' (Book IV. chap. viii. secs. 5 & 9.) Yet there is a real gold, outside the mind, of which the complex idea of gold in the mind must needs try to be a copy, though the conditions of real existence are such that no 'complex idea in the mind' can possibly be a copy of it. Thus the verbal truth, which general propositions concerning substances express, is under a perpetual doom of being really untrue. The exemption of mathematical and moral knowledge from this doom remains an unexplained mercy. Because merely mental, such knowledge is real—there being no reality for it to *mis*represent—and yet not trifling. The proposition that 'the external angle of all triangles is bigger than either of the opposite internal angles,' has that general certainty which is never to be found but in our ideas, yet 'conveys instructive real

In this case general truth must be merely verbal.

[1] Book IV. chap. xi. sec. 13, xii, 9, &c.

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Mathematical truths, since they concern not substances, may be both general and real.

knowledge,' the predicate being 'a necessary consequence of the precise complex idea' which forms the subject, yet 'not contained in it.' (Book IV. chap. viii. sec. 8.)[1] The same might be said apparently, according to Locke's judgment (though he is not so explicit about this), of a proposition in morals, such as 'God is to be feared and obeyed by man.' (Book IV. chap. xi. sec. 13.)[2] But how are such propositions, at once abstract and real, general and instructive, to be accounted for? There is no 'workmanship of the mind' recognised by Locke but that which consists in compounding and abstracting (i.e., separating) ideas of which 'it cannot originate one.' The 'abstract ideas' of mathematics, the 'mixed modes' of morals, just as much as the ideas of substances, must be derived by such mental artifice from a material given in simple feeling, and 'real' because so given. Yet, while this derivation renders ideas of substances unreal in contrast with their real 'originals,' and general propositions about them 'trifling,' because, while 'intimating an existence,' they tell nothing about it, on the other hand it actually constitutes the reality of moral and mathematical ideas. Their relation to an original disappears; they are themselves archetypes, from which the mind, by its own act, can elicit other ideas not already involved in the meaning of their names. But this can only mean that the mind has some other function than that of uniting what it has 'found' in separation, and separating again what it has thus united —that it can itself originate.

Significance of this doctrine.

118. A genius of such native force as Locke's could not be applied to philosophy without determining the lines of future speculation, even though to itself they remained obscure. He stumbles upon truths when he is not looking for them, and the inconsistencies or accidents of his system are its most valuable part. Thus, in a certain sense, he may claim the authorship at once of the popular empiricism of the modern world, and of its refutation. He fixed the prime article of its creed, that thought has nothing to do with the constitution of facts, but only with the representation of them by signs and the rehearsal to itself of what its signs have signified—in brief, that its function is merely the analytical judgment; yet his admissions about mathematical

[1] Just as according to Kant such a proposition expresses a judgment 'synthetical,' yet 'à-priori.'

[2] Cf. Book IV. chap. iii. sec. 18, and Book III. chap. xi. sec. 16.

knowledge rendered inevitable the Kantian question, 'How are synthetic judgments à-priori possible?'—which was to lead to the recognition of thought as constituting the objective world, and thus to get rid of the antithesis between thought and reality. In his separation of the datum of experience from the work of thought he was merely following the Syllogistic Logic, which really assigns no work to the thought, whose office it professes to magnify, but the analysis of given ideas. Taking the work as that Logic conceived it (and as it must be conceived if the separation is to be maintained) he showed—conclusively as against Scholasticism—the 'trifling' character of the necessary and universal truths with which it dealt. Experience, the manifestation of the real, regarded as a series of events which to us are sensations, can only yield propositions singular as the events, and having a truth like them contingent. By consequence, necessity and universality of connection can only be found in what the mind does for itself, without reference to reality, when it analyses the complex idea which it retains as the memorandum of its past single experiences; i.e., in a relation between ideas or propositions of which one explicitly includes the other. Upon this relation syllogistic reasoning rests, and, except so far as it may be of use for convicting an opponent (or oneself) of inconsistency, it has nothing to say against such nominalism as the above. Hence, with those followers of Locke who have been most faithful to their master, it has remained the standing rule to make the generality of a truth consist in its being analytical of the meaning of a name, and its necessity in its being included in one previously conceded. Yet if such were the true account of the generality and necessity of mathematical propositions, their truth according to Locke's explicit statement would be 'verbal and trifling,' not, as it is, 'real and instructive.'

Fatal to the notion that mathematical truths, though general, are got from experience:

119. The point of this, the most obvious, contradiction inherent in Locke's empiricism, is more or less striking according to the fidelity with which the notion of matter-of-fact, or of the reality that is not of the mind, proper to that system, is adhered to. When the popular Logic derived from Locke has so far forgotten the pit whence it was digged as to hold that propositions of a certainty at once real and general can be derived from experience, and to speak without question of 'general matters-of-fact' in a sense which to Locke

almost, to Hume altogether, would have been a contradiction in terms, it naturally finds no disturbance in regarding mathematical certainty as different not in kind, but only in degree, from that of any other 'generalisation from experience.' Not aware that the distinction of mathematical from empirical generality is the condition upon which, according to Locke, the former escapes condemnation as 'trifling,' it does not see any need for distinguishing the sources from which the two are derived, and hence goes on asserting against imaginary or insignificant opponents that mathematical truth is derived from 'experience;' which, if 'experience' be so changed from what Locke understood by it as to yield general propositions concerning matters-of-fact of other than analytical purport, no one need care to deny. That it can yield such propositions is, doubtless, the supposition of the physical sciences; nor, we must repeat, is it the *correctness* of this supposition that is in question, but the validity, upon its admission, of that antithesis between experience and the work of thought, which is the 'be-all and end-all' of the popular Logic.

and to received views of natural science: but Locke not so clear about this.

120. Locke, as we have seen, after all the encroachments made unawares by thought within the limits of that experience which he opposes to it—or, to put it conversely, after all that he allows 'nature' to take without acknowledgment from 'mind'—is still so far faithful to the opposition as to 'suspect a science of nature to be impossible.' This suspicion, which is but a hesitating expression of the doctrine that general propositions concerning substances are merely verbal, is the exact counterpart of the doctrine pronounced without hesitation that mathematical truths, being at once real and general, do not concern nature at all. Real knowledge concerning nature being given by single impressions of bodies at single times operating upon us, and by consequence being expressible only in singular propositions, any reality which general propositions state must belong merely to the mind, and a mind which can originate a reality other than nature's cannot be a passive receptacle of natural impressions. Locke admits the real generality of mathematical truths, but does not face its consequences. Hume, seeing the difficulty, will not admit the real generality. The modern Logic, founded on Locke, believing in the possibility of propositions at once real and general concerning nature,

does not see the difficulty at all. It reckons mathematical to be the same in kind with natural knowledge, each alike being real notwithstanding its generality; not aware that by so doing, instead of getting rid, as it fancies, of the originative function of thought in respect of mathematical knowledge, it only necessitates the supposition of its being originative in respect of the knowledge of nature as well.

Ambiguity as to real essence causes like ambiguity as to science of nature.

121. It may find some excuse for itself in the hesitation with which Locke pronounces the impossibility of real generality in the knowledge of nature—an hesitation which necessarily results from the ambiguities, already noticed, in his doctrine of real and nominal essence. So far as the opposition between the nominal and real essences of substances is maintained in its absoluteness, as that between every possible collection of ideas on the one side, and something wholly apart from thought on the other, this impossibility follows of necessity. But so far as the notion is admitted of the nominal essence being in some way, however inadequately, representative of the real, there is an opening, however indefinite, for general propositions concerning the latter. On the one hand we have the express statement that 'universal propositions, of whose truth and falsehood we can have certain knowledge, concern not existence' (Book IV. chap. ix. sec. 1). They are founded only on the 'relations and habitudes of abstract ideas' (Book IV. chap xii. sec. 7); and since it is the proper operation of the mind in abstraction to consider an idea under no other existence but what it has in the understanding, they represent no knowledge of *real* existence at all (Book IV. chap. ix. sec. 1). Here Locke is consistently following his doctrine that the 'particularity in time,' of which abstraction is made when we consider ideas as in the understanding, is what specially distinguishes the real; which thus can only be represented by 'actually present sensation.' It properly results from this doctrine that the proposition representing particular experiment and observation is only true of real existence so long as the sensation, in which the experiment consists, continues present. Not only is the possibility excluded of such experiment yielding a certainty which shall be general as well as real, but the particular proposition itself can only be *really* true so far as the qualities, whose co-existence it asserts, are present sensations. The for-

Particular experiment cannot afford general knowledge.

mer of these limitations to real truth we find Locke generally recognising, and consequently suspecting a science of nature to be impossible; but the latter, which would be fatal to the supposition of there being a real nature at all, even when he carries furthest the reduction of reality to present feeling, he virtually ignores. On the other hand, there keeps appearing the notion that, inasmuch as the combination of ideas which make up the nominal essence of a substance is taken from a combination in nature or reality, whenever the connexion between any of these is necessary, it warrants a proposition *universally* true in virtue of the necessary connexion between the ideas, and *really* true in virtue of the ideas being taken from reality. According to this notion, though 'the certainty of universal propositions concerning substances is very narrow and scanty,' it is yet possible (Book IV. chap. vi. sec. 13). It is not recognised as involving that contradiction which it must involve if the antithesis between reality and ideas in the mind is absolutely adhered to. Nay, inasmuch as certain ideas of primary qualities, *e.g.* those of solidity and of the receiving or communicating motion upon impulse, are necessarily connected, it is supposed actually to exist (Book IV. chap iii. sec. 14). It is only because, as a matter of fact, our knowledge of the relation between secondary qualities and primary is so limited that it cannot be carried further. That they are related as effects and causes, it would seem, we know; and that the 'causes work steadily, and effects constantly flow from them,' we know also; but 'their connexions and dependencies are not discoverable in our ideas' (Book IV. chap. iii. sec. 29). That, if discoverable in our ideas, just because there discovered, the connexion would not be a real co-existence, Locke never expressly says. He does not so clearly articulate the antithesis between relations of ideas and matters of fact. If he had done so, he must also have excluded from real existence those abstract ideas of body which constitute the scanty knowledge of it that according to him we do possess (Book IV. chap. iii. sec. 24). He is more disposed to sigh for discoveries that would make physics capable of the same general certainty as mathematics, than to purge the former of those mathematical propositions—really true only because having no reference to reality—which to him formed the only scientific element in them.

What knowledge it can

122. The ambiguity of his position will become clearer if we resort to his favourite 'instances in gold.' The proposi-

tion, 'all gold is soluble in aqua regia,' is certainly true, if such solubility is included in the complex idea which the word 'gold' stands for, and if such inclusion is all that the proposition purports to state. It is equally certain and equally trifling with the proposition, 'a centaur is four-footed.' But, in fact, as a proposition concerning substance, it purports to state more than this, viz. that a 'body whose complex idea is made up of yellow, very weighty, ductile, fusible, and fixed,' is always soluble in aqua regia. In other words, it states the invariable co-existence in a body of the complex idea, 'solubility in aqua regia,' with the group of ideas indicated by 'gold.' Thus understood—as instructive or synthetical—it has not the certainty which would belong to it if it were 'trifling,' or analytical, 'since we can never, from the consideration of the ideas themselves, with certainty affirm' their co-existence (Book IV. chap. vi. sec 9). If we see the solution actually going on, or can recall the sight of it by memory, we can affirm its co-existence with the ideas in question in that 'bare instance;' and thus, on the principle that 'whatever ideas have once been united in nature may be so united again' (Book IV. chap. iv. sec. 12), infer a capacity of co-existence between the ideas, but that is all. 'Constant observation may assist our judgments in guessing' an invariable actual co-existence (Book IV. chap. viii. sec. 9); but beyond guessing we cannot get. If our instructive proposition concerning co-existence is to be general it must remain problematical. It is otherwise with mathematical propositions. 'If the three angles of a triangle were once equal to two right angles, it is certain that they always will be so;' but only because such a proposition concerns merely 'the habitudes and relations of ideas.' 'If the perception that the same ideas will eternally have the same habitudes and relations be not a sufficient ground of knowledge, there could be no knowledge of general propositions in mathematics; for no mathematieal demonstration could be other than particular: and when a man had demonstrated any proposition concerning one triangle and circle, his knowledge would not reach beyond that particular diagram' (Book IV. chap. i. sec. 9).

afford, according to Locke.

123. To a reader, fresh from our popular treatises on Logic, such language would probably at first present no difficulty. He would merely lament that Locke, as a successor of Bacon,

Not the knowledge which is now sup-

posed to be got by induction.

was not better acquainted with the 'Inductive methods,' and thus did not understand how an observation of co-existence in the bare instance, if the instance be of the right sort, may warrant a universal affirmation. Or he may take the other side, and regard Locke's restriction upon general certainty as conveying, not any doubt as to the validity of the inference from an observed case to all cases where the conditions are ascertainably the same, but a true sense of the difficulty of ascertaining in any other case that the conditions are the same. On looking closer, however, he will see that, so far from Locke's doctrine legitimately allowing of such an adaptation to the exigencies of science, it is inconsistent with itself in admitting the reality of most of the conditions in the case supposed to be observed, and thus in allowing the real truth even of the singular proposition. This purports to state, according to Locke's terminology, that certain 'ideas' do now or did once co-exist in a body. But the ideas, thus stated to co-exist, according to Locke's doctrine that real existence is only testified to by actual present sensation, differ from each other as that which *really* exists from that which does not. In the particular experiment of gold being solved

Yet more than Locke was entitled to suppose it could give.

in aqua regia, from the complex idea of solubility an indefinite deduction would have to be made for qualification by ideas retained in the understanding before we could reach the present sensation; and not only so, but the group of ideas indicated by 'gold,' to whose co-existence with solubility the experiment is said to testify, as Locke himself says, form merely a nominal essence, while the body to which we ascribe this essence is something which we 'accustom ourselves to suppose,' not any 'parcel of matter' having a real existence in nature.[1] In asserting the co-existence of the ideas forming such a nominal essence with the actual sensation supposed to be given in the experiment, we change the meaning of 'existence,' between the beginning and end of the assertion, from that according to which all ideas exist to that according to which existence has no 'connexion with any other of our ideas but those of ourselves and God,' but is testified to by present sensation.[2] This parologism escapes Locke just as his equivocal use of the term 'idea' escapes him. The distinction, fixed in Hume's terminology as that between im-

[1] See above, paragraphs 35, 94, &c.
[2] See above, paragraph 30 and the following.

pression and idea, forces itself upon him, as we have seen, in the Fourth book of the Essay, where the whole doctrine of real existence turns upon it, but alongside of it survives the notion that ideas, though 'in the mind' and forming a nominal essence, are yet, if rightly taken from things, ectypes of reality. Thus he does not see that the co-existence of ideas, to which the particular experiment, as he describes it, testifies, is nothing else than the co-existence of an event with a conception—of that which is in a particular time, and (according to him) only for that reason real, with that which is not in time at all but is an unreal abstraction of the mind's making.[1] The reality given in the actual sensation cannot, as a matter of fact, be discovered to have a necessary connexion with the ideas that form the nominal essence, and therefore cannot be asserted universally to co-exist with them; but with better faculties, he thinks, the discovery might be made (Book iv. chap. iii. sec. 16). It does not to him imply such a contradiction as it must have done if he had steadily kept in view his doctrine that of particular (*i.e.* real) existence our 'knowledge' is not properly knowledge at all, but simply sensation—such a contradiction as was to Hume involved in the notion of deducing a matter of fact.

With Locke mathematical truths, though ideal, true also of nature.

124. It results that those followers of Locke, who hold the distinction between propositions of mathematical certainty and those concerning real existence to be one rather of degree than of kind, though they have the express words of their master against them, can find much in his way of thinking on their side. This, however, does not mean that he in any case drops the antithesis between matters of fact and relations of ideas in favour of matters of fact, so as to admit that mathematical propositions concern matters of fact, but that he sometimes drops it in favour of relations of ideas, so as to represent real existence as consisting in such relations. If the matter of fact, or real existence, is to be found only in the event constituted or reported by present feeling, such a relation of ideas, by no manner of means reducible to an event, as the mathematical proposition states, can have no sort of connection with it. But if real existence is such that the relations of ideas, called primary qualities of matter, constitute it, and the qualities included in our nominal essences are

[1] See above, paragraphs 45, 80, 85, 97.

its copies or effects, then, as on the one side our complex ideas of substances only fail of reality through want of fulness, or through mistakes in the process by which they are 'taken from things,' so, on the other side, the mental truth of mathematical propositions need only fail to be real because the ideas, whose relations they state, are considered in abstraction from conditions which qualify them in real existence. 'If it is true of the idea of a triangle that its three angles equal two right ones, it is true also of a triangle, wherever it really exists" (Book iv. chap. iv. sec. 6). There is, then, no incompatibility between the idea and real existence. Mathematical ideas might fairly be reckoned, like those of substances, to be taken from real existence; but though, like these, inadequate to its complexity, to be saved from the necessary infirmities which attach to ideas of substances because not considered as so taken, but merely as in the mind. There is language about mathematics in Locke that may be interpreted in this direction, though his most explicit statements are on the other side. It is not our business to adjust them, but merely to point out the opposite tendencies between which a clear-sighted operator on the material given by Locke would find that he had to choose.

Two lines of thought in Locke, between which a follower would have to chose

125. On the one hand there is the identification of real existence with the momentary sensible event. This view, of which the proper result is the exclusion of predication concerning real existence altogether, appears in Locke's restriction of such predication to the singular proposition, and in his converse assertion that propositions of mathematical certainty 'concern not existence' (Book iv. chap.iv.sec. 8). The embarrassment resulting from such a doctrine is that it leads round to the admission of the originativeness of thought and of the reality of its originations, with the denial of which it starts.[1] It leads Locke himself along a track, which his later followers scarcely seem to have noticed, when he treats the 'never enough to be admired discoveries of Mr. Newton' as having to do merely with the relations of ideas in distinction from things, and looks for a true extension of knowledge—neither in syllogism which can yield no instructive, nor in experiment which can yield no general, certainty—but only in a further process of 'singling out and laying in order in-

[1] See above, paragraph 117, sub. fin.

termediate ideas,' which are 'real as well as nominal essences of their species,' because they have no reference to archetypes elsewhere than in the mind (Book iv. chap. vii. sec. 11, and Book iv. chap. xii. sec. 7). On the other hand there is the notion that ideas, without distinction between 'actual sensation' and 'idea in the mind,' are taken from permanent things, and are real if correctly so taken. From this it results that propositions, universally true as representing a necessary relation between ideas of primary qualities, are true also of real existence; and that an extension of such real certainty through the discovery of a necessary connexion between ideas of primary and those of secondary qualities, though scarcely to be hoped for, has no inherent impossibility. It is this notion, again, that unwittingly gives even that limited significance to the particular experiment which Locke assigns to it, as indicating a co-existence between ideas present as sensations and those which can only be regarded as in the mind. Nor is it the intrinsic import so much as the expression of this notion that is altered when Locke substitutes an order of nature for substance as that in which the ideas co-exist. In his Fourth Book he so far departs from the doctrine implied in his chapters on the reality and adequacy of ideas and on the names of substances, as to treat the notion of several single subjects in which ideas co-exist (which he still holds to be the proper notion of substances), as a fiction of thought. There are no such single subjects. What we deem so are really 'retainers to other parts of nature.' 'Their observable qualities, actions, and powers are owing to something without them; and there is not so complete and perfect a part that we know of nature, which does not owe the being it has, and the excellencies of it, to its neighbours' (Book iv. chap. vi. sec. 11). As thus conceived of, the 'objective order' which our experience represents is doubtless other than that collection of fixed separate 'things,' implied in the language about substances which Locke found in vogue, but it remains an objective order still—an order of 'qualities, actions, and powers' which no multitude of sensible events could constitute, but apart from which no sensible event could have such significance as to render even a singular proposition of real truth possible.

Transition to doctrine of God and the soul.

126. It remains to inquire how, with Locke, the ideas of self and God escape subjection to those solvents of reality

which, with more or less of consistency and consciousness, he applied to the conceptions on which the science of nature rests. Such an enquiry forms the natural transition to the next stage in the history of his philosophy. It was Berkeley's practical interest in these ideas that held him back from a development of his master's principles, in which he would have anticipated Hume, and finally brought him to attach that other meaning to the 'new way of ideas' faintly adumbrated in the later sections of his 'Siris,' which gives to Reason the functions that Locke had assigned to Sense.

Thinking substance —source of the same ideas as outer substance

127. The dominant notion of the self in Locke is that of the inward substance, or 'substratum of ideas,' co-ordinate with the outward, 'wherein they do subsist, and from which they do result.' 'Sensation convinces that there are solid extended substances, and reflection that there are thinking ones' (Book II. chap. xxiii. sec. 29). We have already seen how, without disturbance from his doctrine of the fictitiousness of universals, he treats the simple idea as carrying with it the distinction of outward and inward, or relations severally to a 'thing' and to a 'mind.' It reports itself ambiguously as a quality of each of these separate substances. It is now, or was to begin with, the result of an outward thing 'actually operating upon us;' for 'of simple ideas the mind cannot make one to itself:' on the other hand, it is a 'perception,' and perception is an 'operation of the mind.' In other words it is at once a modification of the mind by something of which it is consciously not conscious, and a modification of the mind by itself—the two sources of one and the same modification being each determined only as the contradictory of the other. Thus, when we come to probe the familiar metaphors under which Locke describes Reflection, as a 'fountain of ideas' other than sensation, we find that the confusions which we have already explored in dealing with the ideas of sensation recur under added circumstances of embarrassment. Not only does the simple idea of reflection, like that of sensation, turn out to be already complicated in its simplicity with the superinduced ideas of cause and relation, but the causal substance in question turns out to be one which, from being actually nothing, becomes something by acting upon itself; while all the time the result of this action is indistinguishable from that ascribed to the opposite, the external, cause.

of which substance is perception the effect?

128. To a reader to whom Locke's language has always seemed to be—as indeed it is—simply that of common sense and life, in writing the above we shall seem to be creating a difficulty where none is to be found. Let us turn, then, to one of the less prolix passages, in which the distinction between the two sources of ideas is expressed: 'External objects furnish the mind with the ideas of sensible qualities, which are all those different perceptions they produce in us; and the mind furnishes the understanding with ideas of its own operations' (Book II. chap. i. sec. 5). We have seen already that with Locke perception and idea are equivalent terms. It only needs further to be pointed out that no distinction can be maintained between his usage of 'mind' and of 'understanding,'[1] and that the simple ideas of the mind's own operations are those of perception and power, which must be given in and with every idea of a sensible quality.[2] Avoiding synonyms, then, and recalling the results of our examination of the terms involved in the first clause of the passage before us, we may re-write the whole thus: "Creations of the mind, which yet are external to it, produce in it those perceptions of their qualities which they do produce; and the mind produces in itself the perception of these, its own, perceptions.'

That which is the source of substantiation cannot be itself a substance.

129. This attempt to present Locke's doctrine of the relation between the mind and the world, as it would be without phraseological disguises, must not be ascribed to any polemical interest in making a great writer seem to talk nonsense. The greatest writer must fall into confusions when he brings under the conceptions of cause and substance the self-conscious thought which is their source; and nothing else than this is involved in Locke's avowed enterprise of knowing that which renders knowledge possible as he might know any other object. The enterprise naturally falls into two parts, corresponding to that distinction of subject and object which self-consciousness involves. Hitherto we have been dealing with it on the objective side—with the attempt to know knowledge as a result of experience received through the senses—and have found the supposed source of thought already charged with its creations; with the relations of inner

[1] As becomes apparent on examination of such passages, as Book II. chap. i. sec. 1, sub. fin.; and Book II. chap. i. sec. 23.

[2] See above, paragraphs 11, 12, 16

and outer, of substance and attribute, of cause and effect, of appearance and reality. The supposed 'outward' turns out to have its outwardness constituted by thought, and thus to be inward. The 'outer sense' is only an outer sense at all so far as feelings, by themselves neither outward nor inward, are by the mind referred to a thing or cause which 'the mind supposes;' and only thus have its reports a prerogative of reality over the 'fantasies,' supposed merely of the mind. Meanwhile, unable to ignore the subjective side of self-consciousness, Locke has to put an inward experience as a separate, but co-ordinate, source of knowledge alongside of the outer. But this inward experience, simply as a succession of feelings, does not differ from the outer: it only so differs as referred to that very 'thinking thing,' called the mind, which by its supposition of causal substance has converted feeling into an experience of an outer thing. 'Mind' thus, by the relations which it 'invents,' constitutes both the inner and outer, and yet is treated as itself the inner 'substratum which it accustoms itself to suppose.' It thus becomes the creature of its own suppositions. Nor is this all. This, indeed, is no more than the fate which it must suffer at the hands of every philosopher who, in Kantian language, brings the source of the Categories under the Categories. But with Locke the constitution of the outer world by mental supposition, however uniformly implied, is always ignored; and thus mind, as the inward substance, is not only the creature of its own suppositions, but stands over against a real existence, of which the reality is held to consist just in its being the opposite of all such suppositions: while, after all, the effect of these mutually exclusive causes is one and the same experience, one and the same system of sequent and co-existent ideas.

To get rid of the inner source of ideas in favour of the outer would be false to Locke.

130. Is it then a case of *joint*-effect? Do the outer and inner substances combine, like mechanical forces, to produce the psychical result? Against such a supposition a follower of Locke would find not only the language of his master, with whom perception appears *indifferently* as the result of the outer or inner cause, but the inherent impossibility of analysing the effect into separate elements. The 'Law of Parcimony,' then, will dictate to him that one or other of the causes must be dispensed with; nor, so long as he takes Locke's identification of the outward with the real for

granted, will he have much doubt as to which of the two must go. To get rid of the causality of mind, however, though it might not be untrue to the tendency of Locke, would be to lose sight of his essential merit as a formulator of what everyone thinks, which is that, at whatever cost of confusion or contradiction, he at least formulates it fully. In him the 'Dialectic,' which popular belief implicitly involves, goes on under our eyes. If the primacy of self-conscious thought is never recognized, if it remains the victim of its own misunderstood creations, there is at least no attempt to disguise the unrest which attaches to it in this self-imposed subjection.

The mind, which Locke opposes to matter, perpetually shifting.

131. We have already noticed how the inner 'tablet,' on which the outer thing is supposed to act, is with Locke perpetually receding.[1] It is first the brain, to which the 'motion of the outward parts' must be continued in order to constitute sensation (Book II. chap. ix. sec. 3). Then perception is distinguished from sensation, and the brain itself, as the subject of sensation, becomes the outward in contrast with the understanding as the subject of perception.[2] Then perception, from being simply a reception, is converted into an 'operation,' and thus into an efficient of ideas. The 'understanding' itself, as perceptive, is now the outward which makes on the 'mind,' as the inner 'tablet,' that impression of its own operation in perception which is called an idea of reflection.[3] Nor does the regressive process—the process of finding a mind within the mind—stop here, though the distinction of inner and outer is not any further so explicitly employed in it. From mind, as receptive of, and operative about, ideas, *i. e.* consciousness, is distinguished mind as the 'substance within us' of which consciousness is an 'operation' that it sometimes exercises, sometimes (*e. g.* when it sleeps) does not (Book II. chap. i. secs. 10–12); and from this thinking substance again is distinguished the man who 'finds it in himself' and carries it about with him in a coach or on horseback (Book II. chap. xxiii. sec. 20)—the person, 'consisting of soul and body,' who is prone to sleep and in sound sleep is unconscious, but whose personal identity

[1] See above, paragraph 14.

[2] Book II., chap. i. sec. 23. 'Sensation is such an impression made in some part of the body, as produces some perception in the understanding.'

[3] Locke speaks indifferently of the mind impressing the understanding, and of the understanding impressing the mind, with ideas of reflection, but as he specially defines 'understanding' as the 'perceptive power' (Book II. chap. 21, sec. 25.), I have written as above.

strangely consists in sameness of consciousness, sameness of an occasional operation of part of himself.[1]

Two ways out of such difficulties.

132. In the history of subsequent philosophy two typical methods have appeared of dealing with this chaos of antinomies. One, which we shall have to treat at large in writing of Hume, affects to dispose of both the outward and the inward synthesis—both of the unity of feelings in a subject matter and of their unity in a subject mind—as 'fictions of thought.' This method at once suggests the vital question whether a mind which thus invents has been effectively suppressed—whether, indeed, the theory can be so much as stated without a covert assumption of that which it claims to have destroyed. The other method, of which Kant is the parent, does not attempt to efface the apparent contradictions which beset the 'relation between mind and matter;' but regarding them as in a certain sense inevitable, traces them to their source in the application to the thinking Ego itself of conceptions, which it does indeed constitute in virtue of its presence to phenomena given under conditions of time, but under which for that very reason it cannot itself be known. It is in virtue of the presence of the self-conscious unit to the manifold of feeling, according to this doctrine, that the latter becomes an order of definite things, each external to the other; and it is only by a false inclusion within this order of that which constitutes it that the Ego itself becomes a 'thinking thing' with other things outside it. The result of such inclusion is that the real world, which it in the proper sense makes, becomes a reality external to it, yet apart from which it would not be actually anything. Thus with Locke, though the mind has a potential existence of its own, it is experience of 'things without it' that 'furnishes' it or makes it what it actually is. But the relation of such outer things to the mind cannot be spoken of without contradiction. If supposed outward as bodies, they have to be brought within consciousness as objects of sensation; if supposed outward as sensation, they have to be brought within consciousness—to find a home in the understanding—as ideas of sensation. Meanwhile the consideration returns that after

[1] Cf. II. chap. i. secs. 11 and 14, with II. chap. xxvii. sec. 9. It is difficult to see what ingenuity could reconcile the doctrine stated in Book II. chap. xxvii. sec. 9, that personal identity is identity of consciousness, with the doctrine implied in Book II. chap. i. sec. 11, that the waking Socrates is the same person with Socrates asleep, *i.e.* (according to Locke) not conscious at all.

all the 'thinking thing' contributes something to that which it thinks about; and, this once admitted, it is as impossible to limit its work on one side as that of the outer thing on the other. Each usurps the place of its opposite. Thus with Locke the understanding produces effects on itself, but the product is one and the same 'perception' otherwise treated as an effect of the outer world. One and the same self-consciousness, in short,[1] involving the correlation of subject and object, becomes the result of two separate 'things,' each exclusive of the other, into which the opposite poles of this relation have been converted—the extended thing or 'body' on the one side, and the thinking thing or 'mind' on the other.

'Matter' and 'mind' have the same source in self-consciousness.

133. To each of these supposed 'things' thought transfers its own unity and self-containedness, and thereupon finds itself in new difficulties. These, so far as they concern the outward thing, have already been sufficiently noticed. We have seen how the single self-contained thing on the one hand attenuates itself to the bare atom, presented in a moment of time, which in its exclusiveness is actually nothing:[2] how, on the other, it spreads itself, as everything which for one moment we regard as independent turns out in the next to be a 'retainer' to something else, into a series that cannot be summed.[3] A like consequence follows when the individual man, conceiving of the thought, which is not mine but me, and which is no less the world without which I am not I, as a thinking thing within him, limited by the limitations of his animal nature, seeks in this thinking thing, exclusive of other things, that unity and self-containedness, which only belong to the universal 'I.' He finds that he 'thinks not always;' that during a fourth part of his time he neither thinks nor perceives at all; and that even in his waking hours his consciousness consists of a succession of separate feelings, whose recurrence he cannot command.[4] Thought being thus broken and dependent, substantiality is not to be found in it. It is next sought in the 'thing' of which thought is an occasional operation—a thing of which it may readily be admitted that its nature cannot be known,[5] since it has no nature, being merely that which remains of the thinking thing upon ab-

Difficulties in the way of ascribing reality to substance as matter, reappear in regard to substance as mind.

[1] For the equivalence of perception with self-consciousness in Locke, see above, paragraph 24, et infra.

[2] See above, paragraph 94 and the following.

[3] See above, paragraph 125.

[4] Locke, Essay II. chap. i. sec. 10, etc.

[5] Book II. chap. xxiii. sec. 29, etc.

straction of its sole determination. It is in principle nothing else than the supposed basis of sensible qualities remaining after these have been abstracted—the 'parcel of matter' which has no essence—with which accordingly Locke sometimes himself tends to identify it.[1] But meanwhile, behind this unknown substance, whether of spirit or of body, the self-consciousness, which has been treated as its occasional unessential operation, re-asserts itself as the self which claims both body and spirit, the immaterial no less than the material substance, as its own, and throughout whatever diversity in these maintains its own identity.

We think not always, yet thought constitutes the self.

134. Just, then, as Locke's conception of outward reality grows under his hands into a conception of nature as a system of relations which breaks through the limitations of reality as constituted by mere *individua*, so it is with the self, as he conceived it. It is not a simple idea. It is not one of the train that is for ever passing, 'one going and another coming,' for it looks on this succession as that which it experiences, being itself the same throughout the successive differences (Book II. chap. vii. sec. 9, and chap. xxvii. sec. 9). As little can it be adjusted to any of the conditions of real 'things,' thinking or unthinking, which he ordinarily recognises. It has no 'particularity in space and time.' That which is past in 'reality' is to it present. It is 'in its nature indifferent to any parcel of matter.' It is the same with itself yesterday and to-day, here and there. That 'with which its consciousness can join itself is one self with it,' and it can so join itself with substances apart in space and remote in time (Book II. chap. xxvii. secs. 9, 13, 14, 17). For speaking of it as eternal, indeed, we could find no warrant in Locke. He does not so clearly distinguish it from the 'thinking thing' supposed to be within each man, that has 'had its determinate time and place of beginning to exist, relation to which determines its identity so long as it exists' (Book II. chap. xxvii. sec. 2). Hence he supposed an actual limit to the past which it could make present—a limit seemingly fixed for each man at the farthest by the date of his birth—though he talks vaguely of the possibility of its range being extended (Book II. chap. xxvii. sec. 16). In the discussion of personal identity, however, the distinction gradually forces itself upon him, and he at last expressly says (sec. 16), that if the same Socrates,

[1] See above, paragraph 106, near the end.

sleeping and waking, do not partake of the same consciousness (as according to Book II. chap. i. sec. 11 he certainly does not), 'Socrates sleeping and waking is not the same person;' whereas the 'thinking thing'—the substance of which consciousness is a power sometimes exercised, sometimes not—is the same in the sleeping as in the waking Socrates. This is a pregnant admission, but it brings nothing to the birth in Locke himself. The inference which it suggests to his reader, that a self which does not slumber or sleep is not one which is born or dies, does not seem to have occurred to him. Taking for his method the imaginary process of 'looking into his own breast,' instead of the analysis of knowledge and morality, he could not find the eternal self which knowledge and morality pre-suppose, but only the contradiction of a person whose consciousness is not the same for two moments together, and often ceases altogether, but who yet, in virtue of an identity of this very consciousness, is the same in childhood and in old age.

Locke neither disguises these contradictions, nor attempts to overcome them.

135. Here as elsewhere we have to be thankful that the contradiction had not been brought home so strongly to Locke as to make him seek the suppression of either of its alternatives. He was aware neither of the burden which his philosophy tended to put upon the self which 'can consider itself as itself in different times and places'—the burden of replacing the stable world, when 'the new way of ideas' should have resolved the outward thing into a succession of feelings—nor of the hopelessness of such a burden being borne by a 'perishing' consciousness, 'of which no two parts exist together, but follow each other in succession.'[1] When he 'looked into himself,' he found consciousness to consist in the succession of ideas, 'one coming and another going:' he also found that 'consciousness alone makes what we call self,' and that he was the same self at any different points in the succession. He noted the two 'facts of consciousness' at different stages of his enquiry, and was apparently not struck by their contradiction. He could describe them both, and whatever he could describe seemed to him to be explained.

[1] Cf. II. chap. xiv. sec. 32—'by observing what passes in our minds, how our ideas there in train constantly some vanish and others begin to appear, we come by the idea of succession; and by observing a distance in the parts of this succession, we get the idea of duration'—with chap. xv. sec. 12. 'Duration is the idea we have of perishing distance, of which no two parts exist together, but follow each other in succession.'

Hence they did not suggest to him any question either as to the nature of the observed object or as to the possibility of observing it, such as might have diverted philosophy from the method of self-observation. He left them side by side, and, far from disguising either, put alongside of them another fact—the presence among the perpetually perishing ideas of that of a consciousness identical with itself, not merely in different times and places, but in all times and places. Such an idea, under the designation of an eternal wise Being, he was 'sure he had' (Book II. chap. xvii. sec. 14).

Is the idea of God possible to a consciousness given in time?

136. The remark will at once occur that the question concerning the relation between our consciousness, as in succession, and the idea of God, is essentially different from that concerning the relation between this consciousness and the self identical throughout it, inasmuch as the relation in the one case is between a fact and an idea, in the other between conflicting facts. The identity of the self, which Locke asserts, is one of 'real being,' and this is found to lie in consciousness, in apparent conflict with the fact that consciousness is a succession, of which 'no two parts exist together.' There is no such conflict, it will be said, between the *idea* of a conscious being, who is the same yesterday, to-day, and for ever—the correspondence to which of any reality is a farther question—and the *fact* of our consciousness being in succession. Allowing for the moment the validity of this distinction, we will consider first the difficulties that attach to Locke's account of the idea of God, as an idea.

Locke's account of this idea.

137. This idea, with him, is a 'complex idea of substance.' It is the idea each man has of the 'thinking thing within him, enlarged to infinity.' It is beset then in the first place with all the difficulties which we have found to belong to his doctrine of substance generally and of the thinking substance in particular.[1] These need not be recalled in detail. When God is the thinking substance they become more obvious. It is the antithesis to 'material substance,' as the source of ideas of sensation, that alone with Locke gives a meaning to 'thinking substance,' as the source of ideas of reflection: and if, as we have seen, the antithesis is untenable when it is merely the source of human ideas that is in question, much more must it be so in regard to God, to whom any opposition of material substance must be a limitation of his perfect

[1] See above, paragraph 35 and the following, and 127 and the following.

nature. Of the generic element in the above definition, then, no more need here be said. It is the qualification of 'enlargement to infinity,' by which the idea of man as a thinking substance is represented as becoming the idea of God, that is the special difficulty now before us. Of this Locke writes as follows:—'The complex idea we have of God is made up of the simple ones we receive from reflection. If I find that I know some few things, and some of them, or all perhaps, imperfectly, I can frame an idea of knowing twice as many: which I can double again as often as I can add to number, and thus enlarge my ideas of knowledge by extending its comprehension to all things existing or possible. The same I can do of knowing them more perfectly, *i.e.* all their qualities, powers, causes, consequences, and relations; and thus frame the idea of infinite or boundless knowledge. The same also may be done of power till we come to that we call infinite; and also of the duration of existence without beginning or end; and so frame the idea of an eternal being. . . All which is done by enlarging the simple ideas we have taken from the operation of our own minds by reflection, or by our senses from exterior things, to that vastness to which infinity can extend them. For it is infinity which joined to our ideas of existence, power, knowledge, &c., makes that complex idea whereby we represent to ourselves the supreme being' (Book II. chap. xxiii. sec. 33—35). What is meant by this 'joining of infinity' to our ideas?

'Infinity,' according to Locke's account of it, only applicable to God, if God has parts.

138. 'Finite and infinite,' says Locke, 'are looked upon by the mind as the modes of quantity, and are to be attributed primarily only to those things that have parts and are capable of increase by the addition of any the least part' (Book II. chap. xvii. sec. 1). Such are 'duration and expansion.' The applicability then of the term 'infinite' in its proper sense to God implies that he has expansion or duration; and it is characteristic of Locke that though he was clear about the divisibility of expansion and duration, as the above passage shows, he has no scruple about speaking of them as attributes of God, of whom as being 'in his own essence simple and uncompounded' he would never have spoken as 'having parts.' 'Duration is the idea we have of perishing distance, of which no parts exist together but follow each other in succession; as expansion is the idea of lasting

distance, all whose parts exist together.' Yet of duration and expansion, thus defined, he says that 'in their full extent' (*i. e.* as severally 'eternity and immensity') 'they belong only to the Deity' (Book II. chap. xv. secs. 8 and 12). 'A full extent' of them, however, is in the nature of the case impossible. With a last moment duration would cease to be duration; without another space beyond it space would not be space. Locke is quite aware of this. When his conception of infinity is not embarrassed by reference to God, it is simply that of unlimited 'addibility'—a juxta-position of space to space, a succession of time upon time, to which we can suppose no limit so long as we consider space and time 'as having parts, and thus capable of increase by the addition of parts,' and which therefore excludes the very possibility of a totality or 'full extent' (Book II. chap. xvi. sec. 8, and xvii. sec. 13). The question, then, whether infinity of expansion and duration in this, its only proper, sense can be predicated of the perfect God, has only to be asked in order to be answered in the negative. Nor do we mend the matter if, instead of ascribing such infinity to God, we substitute another phrase of Locke's, and say that He 'fills eternity and immensity' (Book II. chap. xv. sec. 3). Put for eternity and immensity their proper equivalents according to Locke, viz. unlimited 'addibility' of times and spaces, and the essential unmeaningness of the phrase becomes apparent.

Can it be applied to him 'figuratively'?

139. In regard to any other attributes of God than those of his duration and expansion,[1] Locke admits that the term 'infinite' is applied 'figuratively' (Book II. chap. xvii. sec. 1). 'When we call them (*e. g.* His power, wisdom, and goodness) infinite, we have no other idea of this infinity but what carries with it some reflection on, or intimation of, that number or extent of the acts or objects of God's wisdom, &c., which can never be supposed so great or so many which these attributes will not always surmount, let us multiply them in our thoughts as far as we can with all the infinity of endless number.' What determination, then, according to this passage, of our conception of God's goodness is repre-

[1] In the passages referred to, Locke speaks of 'duration and *ubiquity*.' The proper counterpart, however, of 'duration' according to him is 'expansion'—this being to space what duration is to time. Under the embarrassment, however, which necessarily attends the ascription of expansion to God, he tacitly substitutes for it 'ubiquity,' a term which does not match 'duration,' and can only mean presence throughout the *whole* of expansion, presence throughout the whole of that which does not admit of a whole.

sented by calling it infinite? Simply its relation to a number of acts and objects of which the sum can always be increased, and which, just for that reason, cannot represent the perfect God. Is it then, it may be asked, of mere perversity that when thinking of God under attributes that are not quantitative, and therefore do not carry with them the necessity of incompleteness, we yet go out of our way by this epithet 'infinite' to subject them to the conditions of quantity and its 'progressus ad infinitum?'

in virtue of the indefinite number of His acts.

140. Retaining Locke's point of view, our answer of course must be that our ideas of the Divine attributes, being primarily our own ideas of reflection, are either ideas of the single successive acts that constitute our inward experience or formed from these by abstraction and combination. In parts our experience is given, in parts only can we recall it. Our complex or abstract ideas are symbols which only take a meaning so far as we resolve them into the detached impressions which in the sum they represent, or recall the objects, each with its own before and after, from which they were originally taken. So it is with the ideas of wisdom, power, and goodness, which from ourselves we transfer to God. They represent an experience given in succession and piece-meal—a numerable series of acts and events, which like every other number is already infinite in the only sense of the word of which Locke can give a clear account, as susceptible of indefinite repetition (Book II. chap. vi. sec. 8.) When we 'join infinity' to these ideas, then, unless some other meaning is given to infinity, we merely state explicitly what was originally predicable of the experience they embody. Nor will it avail us much to shift the meaning of infinite, as Locke does when he applies it to the divine attributes, from that of indefinite 'addibility' to that of exceeding any sum which indefinite multiplication can yield us. Let us suppose an act of consciousness, from which we have taken an abstract idea of an attribute—say of wisdom—to be a million times repeated; our idea of the attribute will not vary with the repetition. Nor if, having supposed a limit to the repetition, we then suppose the act indefinitely repeated beyond this limit and accordingly speak of the attribute as infinite, will our idea of the attribute vary at all from what it was to begin with. Its content will be the same. There will be nothing to be said of it which could not have

An act, finite in its nature, remains so, however often repeated.

been said of the experience from which it was originally abstracted, and of which the essential characteristic—that it is one of a series of events of which no two can be present together—is incompatible with divine perfection.

God only infinite in a sense in which time is *not* infinite, and which Locke could not recognize

141. It appears then that it is the subjection of our experience to the form of time which unfits the ideas derived from it for any combination into an idea of God; nor by being 'joined with an infinity,' which itself merely means the absence of limit to succession in time, is their unfitness in any way modified. On the contrary, by such conjunction from being latent it becomes patent. In one important passage Locke becomes so far aware of this that, though continuing to ascribe infinite duration to God, he does it under qualifications inconsistent with the very notion of duration. 'Though we cannot conceive any duration without succession, nor put it together in our thoughts that any being does now exist to-morrow or possess at once more than the present moment of duration; yet we can conceive the eternal duration of the Almighty far different from that of man, or any other finite being: because man comprehends not in his knowledge or power all past and future things . . . . what is once past he can never recall, and what is yet to come he cannot make present. . . . God's infinite duration being accompanied with infinite knowledge and power, he sees all things past and to come' (Book II. chap. xv. sec 12). It is clear that in this passage 'infinite' changes its meaning; that it is used in one sense—the proper sense according to Locke—when applied to duration, and in some wholly different sense, not a figurative one derived from the former, when applied to knowledge and power; and that the infinite duration of God, as 'accompanied by infinite power and knowledge,' is no longer in any intelligible sense duration at all. It is no longer 'the idea we have of perishing distance,' derived from our fleeting consciousness in which 'what is once past can never be recalled,' but the attribute of a consciousness of which, if it is to be described in terms of time at all, in virtue of its 'seeing all things past and to come' at once, it can only be said that it 'does now exist to-morrow.' If it be asked, What meaning can we have in speaking of such a consciousness? into what simple ideas can it be resolved when all our ideas are determined by a before and after?—the

answer must be, Just as much or as little meaning as we have when, in like contradiction to the successive presentation of ideas, we speak of a self, constituted by consciousness, as identical with itself throughout the years of our life.

142. A more positive answer it is not our present business to give. Our concern is to show that 'eternity and immensity,' according to any meaning that Locke recognises, or that the observation of our ideas could justify, do not express any conception that can carry us beyond the perpetual incompleteness of our experience; but that in his doctrine of personal identity he does admit a conception which no observation of our ideas of reflection—since these are in succession and could not be observed if they were not—can account for; and that it is just this conception, the conception of a constant presence of consciousness to itself incompatible with conditions of space and time, that can alone give such meaning to 'eternal and infinite' as can render them significant epithets of God. Such a conception (we say it with respect) Locke admits when it is wanted without knowing it. It must indeed always underlie the idea of God, however alien to it may be attempted adaptations of the other 'infinite'—the *progressus ad indefinitum* in space and time—by which, as with Locke, the idea is explained. But it is one for which the psychological method of observing what happens in oneself cannot account, and which therefore this method, just so far as it is thoroughly carried out, must tend to discard. That which happens, whether we reckon it an inward or an outward, a physical or a psychical event—and nothing but an event can, properly speaking, be observed—is as such in time. But the presence of consciousness to itself, though, as the true 'punctum stans,'[1] it is the condition of the observation of events in time, is not such an event itself. In the ordinary and proper sense of 'fact,' it is not a fact at all, nor yet a possible abstraction from facts. To the method, then, which deals with phrases about the mind by ascertaining the observable 'mental phenomena' which they represent, it must remain a mere phrase, to be explained as the offspring of other phrases whose real import has been misunderstood.

—the same sense in which the self is infinite.

[1] Locke, Essay II. chap. xvii. sec. 16.

It can only recover a significance when this method, as with Hume, has done its worst, and is found to leave the possibility of knowledge, without such 'punctum stans,' still unaccounted for.

How do I know my own real existence? —Locke's answer.

143. We have finally to notice the way in which Locke maintains our knowledge of the 'real existence' of thinking substance, both as that which 'we call our mind,' and as God. Of the former first. 'Experience convinces us that we have an intuitive knowledge of our own existence. . . . If I know I feel pain, it is evident I have as certain perception of my own existence as of the pain I feel. If I know I doubt, I have as certain perception of the existence of the thing doubting as of that thought which I call doubt' (Book IV. chap. ix. sec. 3). Upon this the remark must occur that the existence of a painful feeling is one thing; the existence of a permanent subject, remaining the same with itself, when the feeling is over, and through the succession of other feelings, quite another. The latter is what is meant by my own existence, of which undoubtedly there is a 'certain perception,' if the feeling of pain has become the 'knowledge that I feel pain,' and if by the 'I' is understood such a permanent subject. That the feeling, as 'simple idea,' is taken to begin with by Locke for the knowledge that I feel something, we have sufficiently seen.[1] Just as, in virtue of this conversion, it gives us 'assurance' of the real existence of the outer thing or material substance on the one side, so of the thinking substance on the other. It carries with it the certainty at once that I have a feeling, and that something makes me feel. But whereas, after the conversion of feeling into a felt thing has been throughout assumed—as indeed otherwise feeling could not be spoken of—a further question is raised, which causes much embarrassment, as to the real existence of such thing; on the contrary, the reference of the feeling to the *thinking* thing is taken as carrying with it the real existence of such thing. The question whether it really exists or no is only once raised, and then summarily settled by the sentence we have quoted, while the reality whether of existence or of essence on the part of the outward thing, as we have found to our cost, is the main burden of the Third and Fourth Books.

[1] See above, paragraphs 26 and following, and 59 and following.

144. In principle, indeed, the answer to both questions, as given by Locke, is the same: for the reasons which he alleges for being assured of the 'existence of a thing without us corresponding to the idea of sensation' reduce themselves, as we have seen, to the reiteration of that reference of the idea to a thing, which according to him is originally involved in it, and which is but the correlative of its reference to a subject. This, however, is what he was not himself aware of. To him the outer and the inner substance were separate and independent things, for each of which the question of real existence had to be separately settled. To us, according to the view already indicated, it is the presence of self-consciousness, or thought as an object-to-itself, to feeling that converts it into a relation between feeling thing and felt thing, between 'cogitative and incogitative substance.' The source of substantiation upon each side being the same, the question as to the real existence of either substance must be the same, and equally so the answer to it. It is an answer that must be preceded by a counter question.—Does real existence mean existence independent of thought? To suppose such existence is to suppose an impossibility—one which is not the less so though the existence be supposed material, if 'material' means in 'space' and space itself is a relation constituted by the mind, 'bringing things to and setting them by one another.' Yet is the supposition itself but a mode of the logical substantiation we have explained, followed by an imaginary abstraction of the work of the mind from this, its own creation. Does real existence mean a possible feeling? If so, it is as clear that what converts feeling into a relation between felt thing and feeling subject cannot in this sense be real, as it is that without such conversion no distinction between real and fantastic would be possible. Does it, finally, mean individuality, in such a sense that unless I can say this or that is substance, thinking or material, substance does not really exist? If it does, the answer is that substance, being constituted by a relation by which self-conscious thought is for ever determining feelings, and which every predication represents, cannot be identified with any 'this or that,' though without it there could be no 'this or that' at all.

It cannot be known consistently with Locke's doctrine of real existence.

145. We have already found that Locke accepts each of the above as determinations of real existence, and that, though in spite of them he labours to maintain the real existence of

But he ignores this in treating of the self.

outward things, he is so far faithful to them as to declare real essence unknowable. In answering the question as to 'his own existence' he wholly ignores them. He does not ask how the real existence of the thinking Ego sorts with his ordinary doctrine that the real is what would be in the world whether there were a mind or no; or its real identity, present throughout the particulars of experience, with his ordinary doctrine of the fictitiousness of 'generals.' A real existence of the mind, however, founded on the logical necessity of substantiation, rests on a shifting basis, so long as by the mind is understood a thinking thing, different in each man, to which his inner experience is referred as accidents to a substance. The same law of thought which compels such reference requires that the thinking thing in its turn, as that which is born grows and dies, be referred as an accident to some ulterior substance. 'A fever or fall may take away my reason or memory, or both; and an apoplexy leave neither sense nor understanding, no, nor life.'[1] Just as each outer thing turns out to be a 'retainer to something else,' so is it with the inner thing. Such a dependent being cannot be an ultimate substance; nor can any natural agents to which we may trace its dependence really be so either. The logical necessity of further substantiation would affect them equally, appearing in the supposition of an unknown something beyond, which makes them what they are. It is under such logical necessity that Locke, in regard to all the substances which he commonly speaks of as ultimate — God, spirit, body—from time to time gives warning of something still ulterior and unknowable, whether under the designation of substance or real essence (Book II. chap. xxiii. secs. 30 and 36). If, then, it will be said, substance is but the constantly-shifting result of a necessity of thought—so shifting that there is nothing of which we can finally say, 'This is substance, not accident'—there can be no evidence of the 'real existence' of a permanent Ego in the necessary substantiation therein of my inner experience.

Sense in which the self is truly real.

146. The first result of such a consideration in a reader of Locke will naturally be an attempt to treat the inner synthesis as a fiction of thought or figure of speech, and to confine real existence to single feelings in the moments of their occurrence. This, it will seem, is to be faithful to

[1] Locke, Book III. chap. vi. sec. 4.

Locke's own clearer mind, as it frequently emerges from the still-returning cloud of scholasticism. The final result will rather be the discovery that the single feeling is nothing real, but that the synthesis of appearances, which alone for us constitutes reality, is never final or complete: that thus absolute reality, like ultimate substance, is never to be found by us—in a thinking as little as in a material thing—belonging as it does only to that divine self-consciousness, of which the presence in us is the source and bond of the ever-growing synthesis called knowledge, but which, because it is the source of that synthesis and not one of its partial results, is neither real nor knowable in the same sense as is any other object. It is this presence which alone gives meaning to 'proofs of the being of God;' to Locke's among the rest. For it is in a sense true, as he held, that 'my own real existence' is evidence of the existence of God, since the self, in the only sense in which it is absolutely real or an ultimate subject, is already God.[1]

Locke's proof of the real existence of God.

147. Our knowledge of God's existence, according to him, is 'demonstrative,' based on the 'intuitive' knowledge of our own. Strictly taken, according to his definitions, this must mean that the agreement of the idea of God with existence is perceived mediately through the agreement of the idea of self with existence, which is perceived immediately; that thus the idea of God and the idea of self 'agree.'[2] We need not, however, further dwell either on the contradiction implied in the knowledge of real existence, if knowledge is a perception of agreement between ideas and if real existence is the antithesis of ideas; or on the embarrassments which follow when a definition of reasoning, only really applicable to the comparison of quantities, is extended to other regions of knowledge. Locke virtually ignores his definitions in the passage before us. 'If we know there is some real being' (as we do know in the knowledge of our own existence) 'and that non-entity cannot produce any real being, it is an evident demonstration that from eternity there has been something; since what was not from eternity had a beginning, and what had a beginning must be produced by something else' (Book IV. chap. x. sec. 3). Next as to the qualities of this something else. 'What had its being and beginning from another must also have all that which

[1] See below, paragraph 152.

[2] See above, paragraphs 25 and 24.

is in, and belongs to, its being from another too' (Ibid. sec. 4.). From this is deduced the supreme power and perfect knowledge of the eternal being upon the principle that whatever is in the effect must also be in the cause

There must have been something from eternity to cause what now is.

—a principle, however, which has to be subjected to awkward limitations in order that, while proving enough, it may not prove too much. It might seem that, according to it, since the real being, from which as effect the eternal being as cause is demonstrated, is 'both material and cogitative' or 'made up of body and spirit,' matter as well as thought must belong to the eternal being too. That thought must belong to him, Locke is quite clear. It is as impossible, he holds, that thought should be derived from matter, or from matter and motion together, as that something should be derived from nothing. 'If we will suppose nothing first or eternal, matter can never begin to be: if we suppose bare matter without motion eternal, motion can never begin to be: if we suppose only matter and motion first or eternal, thought can never begin to be' (Book IV. chap. x. sec. 10). The objection which is sure to occur, that it must be equally impossible for matter to be derived from thought, he can scarcely be said to face. He takes refuge in the supreme power of the eternal being, as that which is able to create matter out of nothing. He does not anticipate the rejoinder to which he thus lays himself open, that this power in the eternal being to produce one effect not homogeneous with itself, viz. matter, may extend to another effect, viz. thought, and that thus the argument from thought in the effect to thought in the cause becomes invalid, and nothing but blind power, we know not what, remains as the attribute of the eternal being. Nor does he remember, when he meets the objection drawn from the inconceivability of matter being made out of nothing by saying that what is inconceivable is not therefore impossible (*ibid.* sec. 19), that it is simply the inconceivability of a sequence of something upon nothing that has given him his 'evident demonstration' of an eternal being.

How 'eternity' must be understood if this argument is to be valid:

148. The value of the first step in Locke's argument—the inference, namely, from there being something now to there having been something from eternity—must be differently estimated according to the meaning attached to 'something' and 'from eternity.' If the existence of something means the occurrence of an event, of this undoubtedly it can always

be said that it follows another event, nor to this sequence can any limit be supposed, for a first event would not be an event at all. It would be a contingency contingent upon nothing. Thus understood, the argument from a something now to a something from eternity is merely a statement of the infinity of time according to that notion of infinity, as a 'progressus ad indefinitum,' which we have already seen to be Locke's.[1] It is the exact reverse of an argument to a creation or a first cause. If we try to change its character by a supplementary consideration that infinity in the series of events is inconceivable, the rejoinder will be that a first event is not for that reason any less of a contradiction, and that the infinity which Locke speaks of only professes to be a negative idea, representing the impossibility of conceiving a first event (Book II. chap. xvii. sec. 13, &c.). In truth, however, when Locke speaks of 'something from eternity' he does not mean—what would clearly be no God at all—a series of events to which, because *of events*, and therefore in time, no limit can be supposed; but a being which is neither event nor series of events, to which there is no before or after. The inference to such a being is not of a kind with the transition from one event to another habitually associated with it; and if this be the true account of reasoning from effect to cause, no such reasoning can yield the result which Locke requires. As we have seen, however, this is not his account of it,[2] however legitimately it may follow from his general doctrine.

and how 'cause.'

149. The inference of cause with him is the inference from a change to something having power to produce it.[3] The value of this definition lies not in the notion of efficient power, but in that of an order of nature, which it involves. If instead of 'something having power to produce it' we read 'something that accounts for the change,' it expresses the inference on which all science rests, but which is as far as possible from being merely a transition from one event to another that usually precedes it. An event, interpreted as a change of something that remains constant, is no longer a mere event. It is no longer merely in time, a present which next moment becomes a past. It takes its character from relation to the thing or system of things of which it is an altered appearance, but which in itself is always the same.

[1] See above, paragraph 138.
[2] See above, paragraph 68.
[3] Cf. II. chap. xxvi. sec. 1, and chap. xxi. sec. 1.

Only in virtue of such a relation does it require to be accounted for, to be referred to a 'cause,' which is in truth the conception that holds together or reconciles the endless flux of events with eternal unity. The cause of a 'phenomenon,' even according to the authoritative exponent of the Logic which believes itself to follow Hume, is the 'sum total of its conditions.' In its fulness, that is, it is simply that system of things, conceived explicitly, of which there must already have been an implicit conception in order that the event might be regarded as a change and thus start the search for a cause. An event in time, apart from reference to something not in time, could suggest no enquiry into the sum of its conditions. Upon occurrence of a certain feeling there might indeed be spontaneous recollection of a feeling usually precedent, spontaneous expectation of another usually sequent. But such association of feelings can never explain that conception of cause in virtue of which, when accounting for a phenomenon, we set aside the event which in our actual experience has usually preceded it, for one which we only find to precede it in the single case of a crucial experiment. That we do so shows that it is not because of antecedence in time, however apparently uniform, that an educated man reckons a certain event to be the cause of another, but that, because of its sole sufficiency under the sum of known conditions to account for the given event, he decides it to be its uniform antecedent, however much ordinary appearances may tell to the contrary. Thus, though he may still strangely define cause as a uniformly antecedent event (in spite of its being a definition that would prevent him from speaking of gravity as the cause of the fall of a stone), it is clear that by such event he means one determined by a complex of conditions in an unchanging universe. These conditions, again, he may speak of as contingencies, i.e. as events contingent upon other events in endless series, but he must add 'contingent in accordance with the uniformity of nature'—in other words, he must determine the contingencies by relation to what is not contingent; he must suppose nature unchanging, though our experience of it through sensation be a 'progressus ad indefinitum'—if he is to allow a possibility of knowledge at all. In short, if events were merely events, feelings that happen to me now and next moment are over, no 'law of causation'

and therefore no knowledge would be possible. If the knowledge founded on this law actually exists, then the 'argumentum a contingentiâ mundi' rightly understood—the 'inference' from nature to a being neither in time nor contingent but self-dependent and eternal, that constant reality of which events are the changing appearances—is valid because the conception of nature, of a world to be known, already implies such a being. To the rejoinder that implication in the conception of nature does not prove real existence, the answer must be the question, What meaning has real existence, the antithesis of illusion, except such as is equivalent to this conception?

The world which is to prove an eternal God must be itself eternal.

150. The value, then, of Locke's demonstration of the existence of God, as an argument from there being something now to an eternal being from which the real existence that we know 'has all which is in and belongs to it,' depends on our converting it into the 'argumentum a contingentiâ mundi,' stated as above. In other words, it depends on our interpreting it in a manner which may be warranted by his rough account of causation, and by one of the incompatible views of the real that we have found in him,[1] but which is inconsistent with his opposition of reality to the work of the mind, and his reduction of it to 'particular existence,' as well as with his ordinary view that 'infinite' and 'eternal' can represent only a 'progressus ad indefinitum.' If by 'real existence corresponding to an idea' is meant its presentation in a particular 'here and now,' an attempt to find a real existence of God can bring us to nothing but such a contradiction in terms as a first event. To prove it from the real existence of the self is to prove one impossibility from another. If, on the other hand, real existence implies the determination of our ideas by an order of nature—if it means ideas 'in ordine ad universum' (to use a Baconian phrase), in distinction from 'in ordine ad nos'—then the argument from a present to an eternal real existence is valid, but simply in the sense that the present is already real, and 'has all that is in and belongs to it,' only in virtue of the relation to the eternal.

But will the God, whose existence is so proven, be a thinking being?

151. This, it may be said, is to vindicate Locke's 'proof' only by making it Pantheistic. It gives us an eternity of nature, but not God. Our present concern, however, is not with the distinction between Pantheism and true Theism,

[1] See above, paragraphs 49 and 91.

but with the exposition of Locke's doctrine according to the only development by which it can be made to show the real existence of an eternal being at all. It is only by making the most of certain Cartesian elements that appear in his doctrine, irreconcileable with its general purport, that we can find fair room in it for such a being, even as the system of nature. Any attempt to exhibit (in Hegelian phrase) 'Spirit as the truth of nature,' would be to go wholly beyond our record; yet without this the 'ens realissimum' cannot be the God whose existence Locke believes himself to prove—a *thinking* being from whom matter and motion are derived, but in whom they are not. It is true that, according to the context, it is the real existence of the self from which that of the eternal being is proved. This is because, in the Fourth Book, where the 'proof' occurs, following the new train of enquiry started by the definition of knowledge, Locke has for the time left in abeyance his fundamental doctrine that all simple ideas are types of reality, and is writing as if 'my own real existence' were the only one known with intuitive certainty. This, however, makes no essential difference in the effect of his argument. The given existence, from which the divine is proved, is treated expressly as *both* 'material and cogitative:' nor, since according to Locke the world is both and man is both, and even the 'thinking thing' takes its content from impressions made by matter, could it be otherwise. To have taken thought by itself as the basis of the proof would have been to leave the other part of the world, as he conceived it, to be referred to another God. The difficulty then arises, either that there is no inference possible from the nature of the effect to the nature of the eternal being, its cause; in which case no attribute whatever can be asserted of the latter: or that to it too, like the effect, matter as well as thought must belong.

Yes, according to the true notion of the relation between thought and matter.

152. As we have seen, neither of these alternative views is really met by Locke. To the former we may reply that the relation between two events, of which neither has anything in common with the other, but which we improperly speak of as effect and cause (*e.g.* death and a sunstroke), has no likeness to that which we have explained between the world in its contingency and the world as an eternal system—a relation according to which the cause is the effect in unity. Whatever is part of the reality of the world must belong, it

would seem, to the 'ens realissimum,' its cause. We are thus thrown back on the other horn of the dilemma. Is not matter part of the reality of the world? This is a question to which the method of observing the individual consciousness can give none but a delusive answer. A true answer cannot be given till for this method has been substituted the enquiry, How knowledge is possible, and it has been found that it is only possible as the progressive actualisation in us of a self-consciousness in itself complete, and which in its completeness includes the world as its object. From the point of view thus attained the question as to matter will be, How is it related to this self-consciousness?—a question to which the answer must vary according to what is understood by 'matter.' If it means the abstract opposite of thought—that which is supposed void of all determination that comes of thinking—we must pronounce it simply a delusion, the creation of self-consciousness in one stage of its communication to us. If it means the world as in space and time, this we may allow to be real enough as a stage in the process by which self-consciousness constitutes reality. Thus understood, we may speak of it roughly as part of the 'ens realissimum' which the complete self-consciousness, or God, includes as its object, without any limitation of the divine perfectness. The limitation only seems to arise so far as we, being ourselves (as our knowledge and morality testify), though formally self-conscious, yet parts of this partial world, interpret it amiss and ascribe to it a reality, in abstraction from the self-conscious subject, which it only derives from relation to it. Thus while on the one hand it is the presence in us of God, as the self-conscious source of reality, that at once gives us the idea of God and of an eternal self, and renders superfluous the further question as to their real existence; on the other hand it is because, *for all this* presence, we are but emerging from nature, of which as animals we are parts, that to us there must seem an incompatibility of existence between God and matter, between the self and the flux of events which makes our life. This necessary illusion is our bondage, but when the source of illusion is known, the bondage is already being broken.

Locke's antinomies—Hume takes one.

153. We have now sufficiently explored the system which it was Hume's mission to try to make consistent with itself. We have found that it is governed throughout by the anti-

side of them as true.

thesis between what is given to consciousness—that in regard to which the mind is passive—as the supposed real on the one side, and what is 'invented,' 'created,' 'superinduced' by the mind on the other: while yet this 'real' in all its forms, as described by Locke, has turned out to be constituted by such ideas as, according to him, are not given but invented. Stripped of these super-inductions, nothing has been found to remain of it but that of which nothing can be said—a chaos of unrelated, and therefore unmeaning, *individua*. Turning to the theory of the mind itself, the source of the superinduction, we have found this to be a re-duplication of the prolonged inconsistency which forms the theory of the 'real.' It impresses itself with that which, according to the other theory, is the impress of matter, and it really exists as that which it itself invents. The value of Hume's philosophy lies in its being an attempt to carry out the antithesis more rigorously—to clear the real, whether under the designation of mind or of its object, of all that could not be reckoned as given in feelings which occur to us 'whether we will or no.' The consequence is a splendid failure, a failure which it might have been hoped would have been taken as a sufficient proof that a theory, which starts from that antithesis, cannot even be stated without implicitly contradicting itself.

Hume's scepticism fatal to his own premisses.

154. Such a doctrine—a doctrine founded on the testimony of the senses, which ends by showing that the senses testify to nothing—cannot be criticised step by step according to the order in which its author puts it, for its characteristic is that, in order to state itself, it has to take for granted popular notions which it afterwards shows to be unmeaning. Its power over ordinary thinkers lies just in this, that it arrives at its destructive result by means of propositions which every one believes, but to the validity of which its result is really fatal. An account of our primitive consciousness, which derives its plausibility from availing itself of the conceptions of cause and substance, is the basis of the argument which reduces these conceptions to words misunderstood. It cannot, therefore, be treated by itself, as it stands in the first part of the Treatise on the Understanding, but must be taken in connection with Part IV., especially with the section on 'Scepticism with regard to the Senses;' not upon the plan of discrediting a principle by reference to the 'dangerous' nature

of its consequences, but because the final doctrine brings out the inconsistencies lurking in that assumed to begin with. On this side of his scepticism Hume mainly followed the orthodox Berkeley, of whose criticism of Locke, made with a very different purpose, some account must first be given. The connection between the two authors is instructive in many ways; not least as showing that when the most pious theological purpose expresses itself in a doctrine resting on an inadequate philosophical principle, it is the principle and not the purpose that will regulate the permanent effect of the doctrine.

This derived from Berkeley.

155. Berkeley's treatises, we must remember, though professedly philosophical, really form a theological polemic. He wrote as the champion of orthodox Christianity against 'mathematical atheism,' and, like others of his order, content with the demolition of the rival stronghold, did not stay to enquire whether his own untempered mortar could really hold together the fabric of knowledge and rational religion which he sought to maintain. He found practical ungodliness and immorality excusing themselves by a theory of 'materialism'—a theory which made the whole conscious experience of man dependent upon 'unperceiving matter.' This, whatever it might be, was not an object which man could love or reverence, or to which he could think of himself as accountable. Berkeley, full of devout zeal for God and man, and not without a tincture of clerical party-spirit (as appears in his heat against Shaftesbury, whom he ought to have regarded as a philosophical yoke-fellow), felt that it must be got rid of. He saw, or thought he saw, that the 'new way of ideas' had only to be made consistent with itself, and the oppressive shadow must vanish. Ideas, according to that new way (or, to speak less ambiguously, feelings) make up our experience, and they are not matter. Let us get rid, then, of the self-contradictory assumption that they are either copies of matter—copies of that, of which it is the sole and simple differentia that it is not an idea, or its effects—effects of that which can only be described as the unknown opposite of the only efficient power with which we are acquainted—and what becomes of the philosopher's blind and dead substitute for the living and knowing God? It was one thing, however, to show the contradictions involved in Locke's doctrine of matter, another effectively to replace

Berkeley's religious interest in making Locke consistent.

it. To the latter end Berkeley cannot be said to have made any permanent contribution. That explicit reduction of ideas to feelings 'particular in time,' which was his great weapon of destruction, was incompatible with his doing so. He adds nothing to the philosophy, which he makes consistent with itself, while by making it consistent he empties it of three parts of its suggestiveness. His doctrine, in short, is merely Locke purged, and Locke purged is no Locke.

What is meant by relation of mind and matter?

156. The question which he mainly dealt with may be stated in general terms as that of the relation between the mind and the external world. Under this general statement, however, are covered several distinct questions, the confusion between which has been a great snare for philosophers—questions as to the relations (*a*) between a sensitive and non-sensitive body, (*b*) between thought and its object, (*c*) between thought and something only qualified as the negation of thought. The last question, it will be observed, is what the second becomes upon a certain notion being formed of what the object of thought must be. Upon his notion being discarded a further question (*d*), also covered by the above general statement, must still remain as to the relation between thought, as in each man, and the world which he does not make, but which, in some sort, makes him what he is. In what follows, these questions, for the sake of brevity, will be referred to symbolically.

Confusions involved in Locke's materialism.

157. Locke's doctrine of matter, as we have seen, involves a confusion between (*a*) and (*b*). The feeling of touch in virtue of an intellectual interpretation—*intellectual* because implying the action of the mind as (according to Locke) the source of ideas of relation—becomes the idea of solidity, *i.e.* the idea of a relation between bodies in the way of impulse and resistance. But the function of the intellect in constituting the relation is ignored. Under cover of the ambiguous 'idea,' which stands alike for a nervous irritation and the intellectual interpretation thereof, the feeling of touch and conception of solidity are treated as one and the same. Thus the true *conceived* outwardness of body to body —an outwardness which thought, as the source of relations, can alone constitute—becomes first an imaginary *felt* outwardness of body to the organs of touch, and then, by a further fallacy—these organs being confused with the mind —an outwardness of body to mind, which we need only kick

a stone to be sure of. Meanwhile the consideration of question (*d*) necessitates the belief that the real world does not come and go with each man's fleeting consciousness, and no distinction being recognised between consciousness as fleeting and consciousness as permanent, or between feeling and thought, the real world comes to be regarded as the absolute opposite of thought and its work. This opposition combines with the supposed externality of body to mind to give the notion that body is the real. The qualities which 'the mind finds inseparable from body' thus become qualities which would exist all the same 'whether there were a perceiving mind or no,' and are primarily real; while such as consist in our feelings, though real in so far as, 'not being of our own making, they imply the action of things without us,' are yet only secondarily so because this action is relative to something which is not body. Then, finally, by a renewed confusion of the relation between thought and its object with that between body and body, qualities, which are credited with a primary reality as independent of and antithetical to the mind, are brought within it again as ideas. They are supposed to copy themselves upon it by impact and impression; and that not in touch merely, but (visual feelings being interpreted by help of the same conception) in sight also.

Two ways of dealing with it. Berkeley chooses the most obvious.

158. Such 'materialism' invites two different methods of attack. On the one hand its recognised principle, that all intellectual 'superinduction' upon simple feeling is a departure from the real, may be insisted on, and it may be shown that it is only by such superinduction that simple feeling becomes a feeling of body. Matter, then, with all its qualities, is a fiction except so far as these can be reduced to simple feelings. Such in substance was Berkeley's short method with the materialists. In his early life it seemed to him sufficient for the purposes of orthodox 'spiritualism,' because, having posed the materialist, he took the moral and spiritual attributes of God as 'revealed,' without enquiring into the possibility of such revelation to a merely sensitive consciousness. As he advanced, other questions, fatal to the constructive value of his original method, began to force themselves upon him. Granting that intellectual superinduction = fiction, how is the fiction possible to a mind which cannot originate? Exclude from

reality all that such fiction constitutes, and what remains to be real? These questions, however, though their effect on his mind appears in the later sections of his 'Siris,' he never systematically pursued. He thus missed the true method of attack on materialism—the only one that does not build again that which it destroys—the method which allows that matter is real but only so in virtue of that intellectual super-induction upon feeling without which there could be for us no reality at all: that thus it is indeed opposed to thought, but only by a position which is thought's own act. For the development of such views Berkeley had not patience in his youth nor leisure in his middle life. Whatever he may have suggested, all that he logically achieved was an exposure of the equivocation between feeling and felt body; and of this the next result, as appears in Hume, was a doctrine which indeed delivers mind from dependence on matter, but only by reducing it in effect to a succession of feelings which cannot know themselves.

His account of the relation between visible and tangible

159. It was upon the extension of the metaphor of impression to sight as well as touch, and the consequent notion that body, with its inseparable qualities, revealed itself through both senses, that Berkeley first fastened. Is it evident, as Locke supposed it to be, that men 'perceive by their sight' not colours merely, but 'a distance between bodies of different colours and between parts of the same body';[1] in other words, situation and magnitude? To show that they do not is the purpose of Berkeley's 'Essay towards a new Theory of Vision.' He starts from two principles which he takes as recognised: one, that the 'proper and immediate object of sight is colour'; the other, that distance from the eye, or distance in the line of vision, is not immediately seen. If, then, situation and magnitude are 'properly and immediately' seen, they must be qualities of colour. Now in one sense, according to Berkeley, they are so: in other words, there is such a thing as *visible* extension. We see lights and colours in 'sundry situations' as well as 'in degrees of faintness and clearness, confusion and distinctness.' (*Theory of Vision*, sec. 77.) We also see objects as made up of certain 'quantities of coloured points,' *i.e.* as having visible magnitude. (Ibid. sec. 54.) But situation

[1] Locke, Essay II. chap. xiii. sec. 2.

and magnitude *as visible* are not external, not 'qualities of body,' nor do they represent by any *necessary* connection the situation and magnitude that are truly qualities of body, 'without the mind and at a distance.' These are tangible. Distance in all its forms—as distance from the eye; as distance between parts of the same body, or magnitude; and as distance of body from body, or situation—is tangible. What a man means when he says that 'he sees this or that thing at a distance' is that 'what he sees suggests to his understanding that after having passed a certain distance, to be measured by the motion of his body which is perceivable by touch, he shall come to perceive such and such tangible ideas which have been usually connected with such and such visible ideas' (Ibid. sec. 45). On the same principle we are said to see the magnitude and situation of bodies. Owing to long experience of the connection of these tangible ideas with visible ones, the magnitude of the latter and their degrees of faintness and clearness, of confusion and distinctness, enable us to form a 'sudden and true' estimate of the magnitude of the former (*i.e.* of bodies); even as visible situation enables us to form a like estimate of the 'situation of things outward and tangible' (Ibid. secs. 56 and 99). The connection, however, between the two sets of ideas, Berkeley insists, is habitual only, not necessary. As Hume afterwards said of the relation of cause and effect, it is not constituted by the nature of the ideas related.[1] The visible ideas, that as a matter of fact 'suggest to us the various magnitudes of external objects before we touch them, might have suggested no such thing.' That would really have been the case had our eyes been so framed as that the *maximum visibile* should be less than the *minimum tangibile*; and, as a matter of constant experience, the greater visible extension suggests sometimes a greater, sometimes a less, tangible extension according to the degree of its strength or faintness, 'being in its own nature equally fitted to bring into our minds the idea of small or great or no size at all, just as the words of a language are in their own nature indifferent to signify this or that thing, or nothing at all.' (Ibid. secs. 62–64.)

We do not see bodies without the mind,

160. So far, then, the conclusion merely is that body as external, and space as a relation between bodies or parts of a body, are not both seen and felt, but felt only; in other

nor yet feel them.

[1] See below, paragraph 283.

The 'esse' of body is the 'percipi.'

words, that it is only through the organs of touch that we receive, strictly speaking, impressions from without. This is all that the Essay on Vision goes to show; but according to the 'Principles of Human Knowledge' this conclusion was merely provisional. The object of touch does not, any more than the object of sight, 'exist without the mind,' nor is it 'the image of an external thing.' 'In strict truth the ideas of sight, when by them we apprehend distance and things placed at a distance, do not suggest or mark out to us things actually existing at a distance, but only admonish us what ideas of touch will be imprinted in our minds at such and such distances of time, and in consequence of such and such actions' ('Principles of H. K.' sec. 44). Whether, then, we speak of visible or tangible objects, the object *is* the idea, its 'esse is the percipi.' Body is not a thing separate from the idea of touch, yet revealed by it; so far as it exists at all, it must either be that idea or be a succession of ideas of which that idea is suggestive. It follows that the notion of the real which identifies it with matter, as something external to and independent of consciousness, and which derives the reality of ideas from their relation to body as thus outward, must disappear. Must not, then, the distinction between the real and fantastic, between dreams and facts, disappear with it? What meaning is there in asking whether any given idea is real or not, unless a reference is implied to something other than the idea itself?

What then becomes of distinction between reality and fancy?

170. Berkeley's theory, no less than Locke's, requires such reference. He insists, as much as Locke does, on the difference between ideas of imagination which do, and those of sense which do not, depend on our own will. 'It is no more than willing, and straightway this or that idea arises in my fancy; and by the same power it is obliterated and makes way for another.' But 'when in broad daylight I open my eyes, it is not in my power to choose whether I shall see or no, or to determine what particular objects shall present themselves to my view.' Moreover 'the ideas of sense are more strong, lively, and distinct than those of the imagination; they have likewise a steadiness, order, and coherence, and are not excited at random as those which are the effects of human wills often are, but in a regular train and series' (Ibid. secs. 28–30). These characteristics of ideas of sense, however, do not with Berkeley, any more than

with Locke, properly speaking, *constitute* their reality. This lies in their relation to something else, of which these characteristics are the tests. The difference between the two writers lies in their several views as to what this 'something else' is. With Locke it was body or matter, as proximately, though in subordination to the Divine Will, the 'imprinter' of those most lively ideas which we cannot make for ourselves. His followers insisted on the proximate, while they ignored the ultimate, reference. Hence, as Berkeley conceived, their Atheism, which he could cut from under their feet by the simple plan of eliminating the proximate reference altogether, and thus showing that God, not matter, is the immediate 'imprinter' of ideas on the senses and the suggester of such ideas of imagination as the ideas of sense, in virtue of habitual association, constantly introduce (Ibid. sec. 33).

The real = ideas that God causes.

171. To eliminate the reference to matter might seem to be more easy than to substitute for it a reference to God. If the object of the idea is only the idea itself, does not all determination by relation logically disappear from the idea, except (perhaps) such as consists in the fact of its sequence or antecedence to other ideas? This issue was afterwards to be tried by Hume—with what consequences to science and religion we shall see. Berkeley avoids it by insisting that the 'percipi,' to which 'esse' is equivalent, implies reference to a mind. At first sight this reference, as common to all ideas alike, would not seem to avail much as a basis either for a distinction between the real and fantastic or for any Theism except such as would 'entitle God to all our fancies.' If it is to serve Berkeley's purpose, we must suppose the idea to carry with it not merely a relation to mind but a relation to it as its effect, and the conscious subject to carry with him such a distinction between his own mind and God's as leads him to refer his ideas to God's mind as their cause when they are lively, distinct and coherent, but when they are otherwise, to his own. And this, in substance, is Berkeley's supposition. To show the efficient power of mind he appeals to our consciousness of ability to produce at will ideas of imagination; to show that there is a divine mind, distinct from our own, he appeals to our consciousness of inability to produce ideas of sense.

Is it then a succession of feelings?

172. Even those least disposed to 'vanquish Berkeley with a grin' have found his doctrine of the real, which is also his

doctrine of God, 'unsatisfactory.' By the real world they are accustomed to understand something which—at least in respect of its 'elements' or 'conditions' or 'laws'—permanently is; though the combinations of the elements, the events which flow from the conditions, the manifestations of the laws, may never be at one time what they will be at the next. But according to the Berkeleian doctrine the permanent seems to disappear: the 'is' gives place to a 'has been' and 'will be.' If I say (*δεικτικῶς*) 'there is a body,' I must mean according to it that a feeling has just occurred to me, which has been so constantly followed by certain other feelings that it suggests a lively expectation of these. The suggestive feeling alone *is*, and it is ceasing to be. If this is the true account of propositions suggested by everyone's constantly-recurrent experience, what are we to make of scientific truths, *e.g.* 'a body will change its place sooner than let another enter it,' 'planets move in ellipses,' 'the square on the hypotheneuse is equal to the squares on the sides.' In these cases, too, does the present reality lie merely in a feeling experienced by this or that scientific man, and to him suggestive of other feelings? Does the proposition that 'planets move in ellipses' mean that to some watcher of the skies, who understands Kepler's laws, a certain perception of 'visible extension' (*i.e.* of colour or light and shade) not only suggests, as to others, a particular expectation of other feelings, which expectation is called a planet, but a further expectation, not shared by the multitude, of feelings suggesting successive situations of the visible extension, which further expectation is called elliptical motion? Such an explanation of general propositions would be a form of the doctrine conveniently named after Protagoras—'*ἀληθὲς ὃ ἑκάστῳ ἑκάστοτε δοκεῖ*'—a doctrine which the vindicators of Berkeley are careful to tell us we must not confound with his. The question, however, is not whether Berkeley himself admits the doctrine, but whether or no it is the logical consequence of the method which he uses for the overthrow of materialists and 'mathematical Atheists'?

Berkeley goes wrong from confusion between thought and feeling.

173. His purpose was the maintenance of Theism, and a true instinct told him that pure Theism, as distinct from nature-worship and dæmonism, has no philosophical foundation, unless it can be shown that there is nothing real apart from thought. But in the hurry of theological advocacy,

and under the influence of a misleading terminology, he failed to distinguish this true proposition—there is nothing real apart from thought—from this false one, its virtual contradictory—there is nothing other than feeling. The confusion was covered, if not caused, by the ambiguity, often noticed, in the use of the term 'idea.' This to Berkeley's generation stood alike for feeling proper, which to the subject that merely feels is neither outer nor inner, because not referring itself to either mind or thing, and for conception, or an object thought of under relations. According to Locke, pain, colour, solidity, are all ideas equally with each other and equally with the *idea of* pain, *idea of* colour, *idea of* solidity. If all alike, however, were feelings proper, there would be no world either to exist or be spoken of. Locke virtually saves it by two suppositions, each incompatible with the equivalence of idea to feeling, and implying the conversion of it into conception as above defined. One is that there are abstract ideas; the other that there are primary qualities of which ideas are copies, but which do not come and go with our feelings. The latter supposition gives a world that 'really exists,' the former a world that may be known and spoken of; but neither can maintain itself without a theory of conception which is not forthcoming in Locke himself. We need not traverse again the contradictions which according to his statement they involve—contradictions which, under whatever disguise, must attach to every philosophy that admits a reality either in things as apart from thought or in thought as apart from things, and only disappear when the thing as thought of, and through thought individualised by the relations which constitute its community with the universe, is recognised as alone the real. Misled by the phrase 'idea of a thing,' we fancy that idea and thing have each a separate reality of their own, and then puzzle ourselves with questions as to how the idea can represent the thing—how the ideas of primary qualities can be copies of them, and how, if the real thing of experience be merely individual, a general idea can be abstracted from it. These questions Berkeley asked and found unanswerable. There were then two ways of dealing with them before him. One was to supersede them by a truer view of thought and its object, as together in essential correlation constituting the real; but this way he did not take. The other was to avoid them by merging both thing and idea in the indifference of

For Locke's 'idea of a thing' he substitutes 'idea' simply

simple feeling. For a merely sentient being, it is true—for one who did not think upon his feelings—the oppositions of inner and outer, of subjective and objective, of fantastic and real, would not exist; but neither would knowledge or a world to be known. That such oppositions, misunderstood, may be a heavy burden on the human spirit, the experience of current controversy and its spiritual effects might alone suffice to convince us; but the philosophical deliverance can only lie in the recognition of thought as their author, not in the attempt to obliterate them by the reduction of thought and its world to feeling—an attempt which contradicts itself, since it virtually admits their existence while it renders them unaccountable.

Which, if idea = feeling, does away with space and body.

174. That Berkeley's was such an attempt, looking merely to his treatment of primary qualities and abstract ideas, we certainly could not doubt: though, since language does not allow of its consistent statement, and Berkeley was quite ready to turn the exigencies of language to account, passages logically incompatible with it may easily be found in him. The hasty reader, when he is told that body or distance are suggested by feelings of sight and touch rather than immediately seen, accepts the doctrine without scruple, because he supposes that which is suggested to be a present reality, though not at present felt. But if not at present felt it is not according to Berkeley an idea, therefore 'without the mind,' therefore an impossibility.[1] That which is suggested, then, must itself be a feeling which consists in the expectation of other feelings. Distance, and body, *as suggested*, can be no more than such an expectation; and as *actually existing*, no more than the actual succession of the expected feelings—a succession of which, as of every succession, 'no two parts exist together.'[2] There is no time, then, at which it can be said that distance and body exist.

He does not even retain them as 'abstract ideas.'

175. This, it may seem, however inconsistent with the doctrine of primary qualities, is little more than the result which Locke himself comes to in his Fourth Book; since, if 'actual present succession' forms our only knowledge of real existence, there could be no time at which distance and body might be *known* as really existing. But Locke, as we have

[1] Reference is here merely made to the doctrine by which Berkeley disposes of 'matter,' the consideration of its reconcilability with his doctrine of 'spirits' and 'relations' as objects of knowledge being postponed.

[2] Locke, Book II. chap. XV. sec. 1.

seen, is able to save mathematical, though not physical, knowledge from the consequences of this admission by his doctrine of abstract ideas—'ideas removed in our thoughts from particular existence'—whose agreement or disagreement is stated in propositions which 'concern not existence,' and for that reason may be general without becoming either uncertain or uninstructive. This doctrine Berkeley expressly rejects on the ground that he could not perceive separately that which could not exist separately ('Principles of Human Knowledge,' Introduction, sec. 10); a ground which to the ordinary reader seems satisfactory because he has no doubt, and Berkeley's instances do not suggest a doubt, as to the present existence of 'individual objects'—this man, this horse, this body. But with Berkeley to exist means to be felt ('Principles of Human Knowledge,' sec. 3), and the feelings, which I name a body, being successive, its existence must be in succession likewise. The limitation, then, of possibility of 'conception' by possibility of existence, means that 'conception,' too, is reduced to a succession of feelings.

On the same principle all permanent relations should disappear.

176. Berkeley, then, as a consequence of the methods by which he disposes at once of the 'real existence' and 'abstract idea of matter,' has to meet the following questions:—How are either reality or knowledge possible without permanent relations? and, How can feelings, of which one is over before the next begins, constitute or represent a world of permanent relations? The difficulty becomes more obvious, though not more serious, when the relations in question are not merely themselves permanent, as are those between natural phenomena, but are relations between permanent parts like those of space. It is for this reason that its doctrine of geometry is the most easily assailable point of the 'sensational' philosophy. Locke distinguishes the ideas of space and of duration as got, the one from the permanent parts of space, the other 'from the fleeting and perpetually perishing parts of succession.'[1] He afterwards prefers to oppose the term 'expansion' to 'duration,' as bringing out more clearly than 'space' the opposition of relation between permanent facts to that between 'fleeting successive facts which never exist together.' How, then, can a consciousness, consisting simply of 'fleeting successive facts,' either be or represent that of which the differentia is that its facts are permanent and co-exist?

[1] Book II. chap. xiv. sec. 1.

By making colour = relations of coloured points, Berkeley represents relation as seen.

177. This crucial question in regard to extension does not seem even to have suggested itself to Berkeley. The reason why is not far to seek. Professor Fraser, in his valuable edition, represents him as meaning by visible extension 'coloured experience in sense,' and by tangible extension 'resistent experience in sense.'[1] No fault can be found with this interpretation, but the essential question, which Berkeley does not fairly meet, is whether the experience in each case is complete in a single feeling or consists in a succession of feelings. If in a single feeling, it clearly is not extension, as a relation between parts, at all; if in a succession of feelings, it is only extension because a synthetic principle, which is not itself one of the feelings, but equally present to them all, transforms them into permanent parts of which each qualifies the other by outwardness to it. Berkeley does not see the necessity of such a principle, because he allows himself to suppose extension—at any rate visible extension—to be constituted by a single feeling. Having first pronounced that the proper object of sight is colour, he quietly substitutes for this *situations* of colour, degrees of strength and faintness in colour, and quantities of coloured points, as if these, interchangeably with mere colour, were properly objects of sight and perceived in single acts of vision. Now if by object of sight were meant something other than the sensation itself—something which to a thinking being it suggests as its cause—there would be no harm in this language, but neither would there be any ground for saying that the proper object of sight is colour, for distinguishing visible from tangible extension, or for denying that the outwardness of body to body is seen. Such restrictions and distinctions have no meaning, unless by sight is meant the nervous irritation, the affection of the visual organ, as it is to a merely feeling subject; yet in the very passages where he makes them, by saying that we see situations and degrees of colour, and quantities of coloured points, Berkeley converts sight into a judgment of extensive and intensive quantity. He thus fails to discern that the transition from colour to coloured extension cannot be made without on the one hand either the presen-

[1] See Fraser's Berkeley, 'Theory of Vision,' note 42. I may here say that I have gone into less detail in my account of Berkeley's system than I should otherwise have thought necessary, because Professor Fraser has supplied, in the way of explanation of it, all that a student can require.

tation of successive pictures or (which comes to the same) successive acts of attention to a single picture, and on the other hand a synthesis of the successive presentations as mutually qualified parts of a whole. In other words, he ignores the work of thought involved in the constitution alike of coloured and tangible extension, and in virtue of which alone either is extension at all.

178. But though he does not scruple to substitute for colour situations and quantities of coloured points, these do not with him constitute space, which he takes according to Locke's account of it to be 'distance between bodies or parts of the same body.' This, according to his 'Theory of Vision,' is *tangible* extension, and this again is alone the object of geometry. As in that treatise a difference is still supposed between tangible extension and the feeling of touch, the question does not there necessarily arise whether the tactual experience, that constitutes this extension, is complete in a single feeling or only in a succession of feelings; but when in the subsequent treatise the difference is effaced, it is decided by implication that the experience is successive:[1] and all received modifications of the theory, which assign to a locomotive or muscular sense the office which Berkeley roughly assigned to touch, make the same implication still more clearly. Now in the absence of any recognition of a synthetic principle, in relation to which the successive experience becomes what it is not in itself, this means nothing else than that space is a succession of feelings, which again means that space is not space, not a qualification of bodies or parts of body by mutual externality, since to such qualification it is necessary that bodies or their parts coexist. Thus, in his hurry to get rid of externality as independence of the mind, he has really got rid of it as a relation between bodies, and in so doing (however the result may be disguised) has logically made a clean sweep of geometry and physics.

Still he admits that space is constituted by a succession of feelings.

179. Of this result he himself shows no suspicion. He professes to be able, without violence to his doctrine, to accept the sciences as they stand, except so far as they rest upon the needless and unmeaning assumptions (as he reckoned

If so, it is not space at all; but Berkeley thinks it is only not 'pure' space.

[1] 'Principles of Human Knowledge,' sec. 44. It will be observed that in that passage Berkeley uses the term 'distance,' not 'space,' and though with him the terms are strictly interchangeable, this may have helped to disguise from him the full monstrosity of the doctrine, 'space is a succession of feelings,' which, stated in that form, must surely have scandalised him.

Space and *pure* space stand or fall together.

them) of *pure* space and its infinite divisibility. The truth seems to be that—at any rate in the state of mind represented by his earlier treatises—he was only able to work on the lines which Locke had laid. It did not occur to him to treat the primary qualities as relations constituted by thought, because Locke had not done so. Locke having treated them as external to the mind, Berkeley does so likewise, and for that reason feels that they must be got rid of. The mode of riddance, again, was virtually determined for him by Locke. Locke having admitted that they copied themselves in feelings, the untenable element in this supposition had only to be dropped and they became feelings simply. It is thus only so far as space is supposed to exist after a mode of which, according to Locke himself, sense could take no copy—*i.e.* as exclusive not merely of all colour but of all body, and as infinitely divisible—that Berkeley becomes aware of its incompatibility with his doctrine. Pure space, or 'vacuum,' to him means space that can not be touched—a tangible extension that is not tangible—and is therefore a contradiction in terms. The notion that, though not touched, it might be seen, he excludes,[1] apparently for the same reason which prevents him from allowing *visible* extension to be space at all; the reason, namely, that there is no 'outness' or relation of externality between the parts of such extension. The fact that there can be no such relation between the successive feelings which alone, according to him, constitute 'tangible extension,' he did not see to be equally fatal to the latter being in any true sense space. In other words, he did not see that the test of reduction to feeling, by which he disposed of the *vacuum*, disposed of space altogether. If he had, he would have understood that space and body were intelligible relations, which can be thought of apart from the feelings which through them become the world that we know, since it is they that are the conditions of these feelings becoming a knowledge, not the feelings that are the condition of the relations being known. Whether they can be thought of apart from each other—whether the simple relation of externality between parts of a whole can be thought of without the parts being considered as solid—is of course a further question, and one which Berkeley cannot be said properly to discuss at all, since the abstraction of space from body to him

[1] 'Principles of Human Knowledge,' sec. 116.

meant its abstraction from feelings of touch. The answer to it ceases to be difficult as soon as the question is properly stated.

Berkeley disposes of space for fear of limiting God.

180. As with vacuum, so with infinite divisibility. Once let it be understood that extension is constituted by the relation of externality between homogeneous parts, and it follows that there can be no *least* part of extension, none that does not itself consist of parts; in other words, that it is infinitely divisible: just as conversely it follows that there can be no *last* part of it, not having another outside it; in other words, that (to use Locke's phrase) it is infinitely addible. Doubtless, as Berkeley held, there is a 'minimum visibile'; but this means that there are conditions under which any seen colour disappears, and disappearing, ceases to be known under the relation of extension; but it is only through a confusion of the relation with the colour that the disappearance of the latter is thought to be a disappearance of so much extension.[1] It was, in short, the same failure to recognise the true ideality of space, as a relation constituted by thought, that on the one hand made its 'purity' and infinity unmeaning to Berkeley, and on the other made him think that, if pure (*sc.* irreducible to feelings) and infinite, it must limit the Divine perfection, either as being itself God or as 'something beside God which is eternal, uncreated, and infinite' ('Principles of Human Knowledge,' sec. 117). Fear of this result set him upon that method of resolving space, and with it the world of nature, into sequent feelings, which, if it had been really susceptible of logical expression, would at best have given him nothing but a *μέγα ζῶον* for God. If he had been in less of a hurry with his philosophy, he might have found that the current tendency to 'bind God in nature or diffuse in space' required to be met by a sounder than his boyish idealism—by an idealism which gives space its due, but reflects that to make space God, or a limitation on God, is to subject thought itself to the most superficial of the relations by which it forms the world that it knows.

How he deals with possibility of general knowledge.

181. So far we have only considered Berkeley's reduction of primary quantities, supposed to be sensible, to sensations as it affects the qualities themselves, rather than as it affects the possibility of universal judgments about them. If, indeed,

[1] The same remark of course applies, *mutatis mutandis*, to the 'minimum tangibile.' See below, paragraphs 265 and 266.

as we have found, such reduction really amounts to the absolute obliteration of the qualities, no further question can remain as to the possibility of general knowledge concerning them. As Berkeley, however, did not admit the obliteration, the further question did remain for him: and the condition of his plausibly answering it was that he should recognise in the 'idea,' as subject of predication, that intelligible qualification by relation which he did not recognise in it simply as 'idea,' and which essentially differences it from feeling proper. If any particular 'tangible extension,' *e.g.* a right-angled triangle, is only a feeling, or in Berkeley's own language, 'a fleeting perishable passion'[1] not existing at all, even as an 'abstract idea,' except when some one's tactual organs are being affected in a certain way—what are we to make of such a general truth as that the square on its base is always equal to the squares on its sides? Omitting all difficulties about the convertibility of a figure with a feeling, we find two questions still remain—How such separation can be made of the figure from the other conditions of the tactual experience as that propositions should be possible which concern the figure simply; and how a single case of tactual experience—that in which the mathematician finds a feeling called a right-angled triangle followed by another which he calls equality between the squares, &c.—leads in the absence of any 'necessary connexion' to the expectation that the sequence will always be the same.[2] The difficulty becomes the more striking when it is remembered that though the geometrical proposition in question, according to Berkeley, concerns the tangible, the experience which suggests it is merely visual.

His theory of universals,

182. Berkeley's answer to these questions must be gathered from his theory of general names. 'It is, I know,' he says, 'a point much insisted on, that all knowledge and demonstration are about universal notions, to which I fully agree: but then it does not appear to me that those notions are formed by abstraction—*universality*, so far as I can comprehend, not consisting in the absolute positive nature or conception of anything, but in the relation it bears to the particulars signified or represented by it; by virtue whereof it is that things, names, or notions, being in their own nature *particular*, are rendered universal. Thus, when I demonstrate

[1] 'Principles of Human Knowledge,' sec. 89. [2] See above, paragraph 122.

any proposition concerning triangles, it is to be supposed that I have in view the universal idea of a triangle; which is not to be understood as if I could frame an idea of a triangle which was neither equilateral nor scalene nor equicrural; but only that the particular triangle I considered, whether of this or that sort it matters not, doth equally stand for and represent all rectilinear triangles whatsoever, and is in that sense universal.' Thus it is that 'a man may consider a figure merely as triangular.' ('Principles of Human Knowledge,' Introd. secs. 15 and 16.)

of value, as implying that universality of ideas lies in relation.

183. In this passage appear the beginnings of a process of thought which, if it had been systematically pursued by Berkeley, might have brought him to understand by the 'percipi,' to which he pronounced 'esse' equivalent, definitely the 'intelligi.' As it stands, the result of the passage merely is that the triangle (for instance) 'in its own nature,' because 'particular,' is not a possible subject of general predication or reasoning: that it is so only as 'considered' under a relation of resemblance to other triangles and by such consideration universalized. 'In its own nature,' or as a 'particular idea,' the triangle, we must suppose, is so much tangible (or visible, as symbolical of tangible) extension, and therefore according to Berkeley a feeling. But a relation, as he virtually admits,[1] is neither a feeling nor felt. The triangle, then, as considered under relation and thus a possible subject of general propositions, is quite other than the triangle in its own nature. This, of course, is so far merely a virtual repetition of Locke's embarrassing doctrine that real things are not the things which we speak of, and which are the subject of our sciences; but it is a repetition with two fruitful differences —one, that the thing in its 'absolute positive nature' is more explicitly identified with feeling; the other, that the process, by which the thing thought and spoken of is supposed to be derived from the real thing, is no longer one of 'abstraction,' but consists in consideration of relation. It is true that with Berkeley the mere feeling has a 'positive nature' apart from considered relations,[2] and that the considered relation, by which the feeling is universalised, is only that of resemblance between properties supposed to exist independently of it. The 'particular triangle,' reducible to feelings of touch, has its

[1] See 'Principles of Human Knowledge,' sec. 89. (2nd edit.)
[2] See below, paragraph 298.

triangularity (we must suppose) simply as a feeling. It is only the resemblance between the triangularity in this and other figures—not the triangularity itself—that is a relation, and, as a relation, not felt but considered; or in Berkeley's language, something of which we have not properly an 'idea' but a 'notion.'[1]

But he fancies that each idea has a positive nature apart from relation.

184. But though Berkeley only renders explicit the difficulties implicit in Locke's doctrine of ideas, that is itself a great step taken towards disposing of them. Once let the equivocation between sensible qualities and sensations be got rid of—once let it be admitted that the triangle in its absolute nature, as opposed to the triangle considered, is merely a feeling, and that relations are not feelings or felt—and the question must soon arise, What in the absence of all relation remains to be the absolute nature of the triangle? It is a question which ultimately admits of but one answer. The triangularity of the given single figure must be allowed to be just as much a relation as the resemblance, consisting in triangularity, between it and other figures; and if a relation, then not properly felt, but understood. The 'particular' triangle, if by that is meant the triangle as subject of a singular proposition, is no more 'particular in time,' no more constituted by the occurrence of a feeling, than is the triangle as subject of a general proposition. It really exists as constituted by relation, and therefore only as 'considered' or understood. In its existence, as in the consideration of it, the relations indicated by the terms 'equilateral, equicrural and scalene,' presuppose the relation of triangularity, not it them; and for that reason it can be considered apart from them, though not they apart from it, without any breach between that which is considered and that which really exists. Thus, too, it becomes explicable that a single experiment should warrant a universal affirmation; that the mathematician, having once found as the result of a certain comparison of magnitudes that the square on the hypothenuse is equal to the square on the sides, without waiting for repeated experience at once substitutes for the singular proposition, which states his discovery, a general one. If the

[1] 'Principles of Human Knowledge,' *Ibid.* This perhaps is the best place for saying that it is not from any want of respect for Dr. Stirling that I habitually use 'notion' in the loose popular way which he counts 'barbarous,' but because the barbarism is so prevalent that it seems best to submit to it, and to use 'conception' as the equivalent of the German 'Begriff.'

singular proposition stated a sensible event or the occurrence of a feeling, such substitution would be inexplicable: for if that were the true account of the singular proposition, a general one could but express such expectation of the recurrence of the event as repeated experience of it can alone give. But a relation is not contingent with the contingency of feeling. It is permanent with the permanence of the combining and comparing thought which alone constitutes it; and for that reason, whether it be recognised as the result of a mathematical construction or of a crucial experiment in physics, the proposition which states it must already be virtually universal.

Traces of progress in his idealism.

185. Of such a doctrine Berkeley is rather the unconscious forerunner than the intelligent prophet. It is precisely upon the question whether, or how far, he recognised the constitution of things by intelligible relations, that the interpretation of his early (which is his only developed) idealism rests. Is it such idealism as Hume's, or such idealism as that adumbrated in some passages of his own 'Siris'? Is the idea, which is real, according to him a feeling or a conception? Has it a nature of its own, consisting simply in its being felt, and which we afterwards for purposes of our own consider in various relations; or does the nature consist only in relations, which again imply the action of a mind that is eternal—present to that which is in succession, but not in succession itself? The truth seems to be that this question in its full significance never presented itself to Berkeley, at least during the period represented by his philosophical treatises. His early idealism, as we learn from the commonplace-book brought to light by Professor Fraser, was merely a cruder form of Hume's. By the time of the publication of the 'Principles of Human Knowledge' he had learnt that, unless this doctrine was to efface 'spirit' as well as 'matter,' he must modify it by the admission of a 'thing' that was not an 'idea,' and of which the 'esse' was 'percipere' not 'percipi.' This admission carried with it the distinction between the object felt and the object known, between 'idea' and 'notion'—a distinction which was more clearly marked in the 'Dialogues.' Of 'spirit' we could have a 'notion,' though not an 'idea.' But it was only in the second edition of the 'Principles' that 'relation' was put along with 'spirit,' as that which could be known but which was no 'idea;' and

then without any recognition of the fact that the whole reduction of primary qualities to mere ideas was thereby invalidated. The objects, with which the mathematician deals, are throughout treated as in their own nature 'particular ideas,' into the constitution of which relation does not enter at all; in other words, as successive feelings.

His way of dealing with physical truths.

186. If the truths of mathematics seemed to Berkeley explicable on this supposition, those of the physical sciences were not likely to seem less so. As long as the relations with which these sciences deal are relations between 'sensible objects,' he does not notice that they *are* relations, and therefore not feelings or felt, at all. He treats felt things as if the same as feelings, and ignores the relations altogether. Thus a so-called 'sensible' motion causes him no difficulty. He would be content to say that it was a succession of ideas, not perceiving that motion implies a relation between spaces or moments as successively occupied by something that remains one with itself—a relation which a mere sequence of feelings could neither constitute nor of itself suggest. It is only about a motion which does not profess to be 'seen,' such as the motion of the earth, that any question is raised—a question easily disposed of by the consideration that in a different position we should see it. 'The question whether the earth moves or not amounts in reality to no more than this, to wit, whether we have reason to conclude from what hath been observed by astronomers, that if we were placed in such and such circumstances, and such or such a position and distance both from the earth and sun, we should perceive the former to move among the choir of the planets, and appearing in all respects like one of them: and this by the established rules of nature, which we have no reason to mistrust, is reasonably collected from the phenomena' ('Principles of Human Knowledge,' sec. 58).[1]

If they imply permanent relations, his theory properly excludes them.

187. Now this passage clearly does not mean—as it ought to mean if the '*esse*' of the motion were the '*percipi*' by us—that the motion of the earth would begin as soon as we were there to see it. It means that it is now going on as an 'established law of nature,' which may be 'collected from the phenomena.' In other words, it means that our successive feelings are so related to each other as determined by one present and permanent system, on which not they only but

[1] Cf. 'Dialogues,' page 147, in Prof. Fraser's edition.

all possible feelings depend, that by a certain set of them we are led—not to expect a recurrence of them in like order according to the laws of association, but, what is the exact reverse of this—to infer that certain other feelings, of which we have no experience, would now occur to us if certain conditions of situation on our part were fulfilled, because the 'ordo ad universum,' of which these feelings would be the 'ordo ad nos,' does now obtain. But though Berkeley's words mean this for us, they did not mean it for him. That such relation—merely intelligible, or according to his phraseology not an idea or object of an idea at all, as he must have admitted it to be—gives to our successive feelings the only 'nature' that they possess, he never recognised. By the relation of idea to idea, as he repeatedly tells us, he meant not a 'necessary connexion,' *i.e.* not a relation without which neither idea would be what it is, but such *de facto* sequence of one upon the other as renders the occurrence of one the unfailing but arbitrary sign that the other is coming. It is thus according to him (and here Hume merely followed suit) that feelings are symbolical—symbolical not of an order other than the feelings and which accounts for them, but simply of feelings to follow. To Berkeley, indeed, unlike Hume, the sequence of feelings symbolical of each other is also symbolical of something farther, viz. the mind of God: but when we examine what this 'mind' means, we find that it is not an intelligible order by which our feelings may be interpreted, or the spiritual subject of such an order, but simply the arbitrary will of a creator that this feeling shall follow that.

He supposes a divine decree that one feeling shall follow another.

188. Such a doctrine could not help being at once confused in its account of reality, and insecure in its doctrine alike of the human spirit and of God. On the recognition of relations as constituting the *nature* of ideas rests the possibility of any tenable theory of their reality. An isolated idea could be neither real nor unreal. Apart from a definite order of relation we may suppose (if we like) that it would *be*, but it would certainly not be real; and as little could it be unreal, since unreality can only result from the confusion in our consciousness of one order of relation with another. It is diversity of relations that distinguishes, for instance, these letters as they now appear on paper from the same as I imagine them with my eyes shut, giving each sort its own reality: just as upon

Locke had explained reality by relation of ideas to outward body.

Liveliness in the idea evidence of this relation.

confusion with the other each alike becomes unreal. Thus, though with Locke simple ideas are necessarily real, we soon find that even according to him they are not truly so in their simplicity, but only as related to an external thing producing them. He is right enough, however inconsistent with himself, in making relation constitute reality; wrong in limiting this prerogative to the one relation of externality. When he afterwards, in virtual contradiction to this limitation, finds the reality of moral and mathematical ideas just in that sole relation to the mind, as its products, which he had previously made the source of all unreality, he forces upon us the explanation which he does not himself give, that unreality does not lie in either relation as opposed to the other, but in the confusion of any relation with another. It is for lack of this explanation that Locke himself, as we have seen, finds in the liveliness and involuntariness of ideas the sole and sufficient tests (not *constituents*) of their reality; though they are obviously tests which put the dreams of a man in a fever upon the same footing with the 'impressions' of a man awake, and would often prove that unreal after dinner which had been proved real before. There is a well-known story of a man who in a certain state of health commonly saw a particular gory apparition, but who, knowing its origin, used to have himself bled till it disappeared. The reality of the apparition lay, he knew, in some relation between the circulation of his blood and his organs of sight, in distinction from the reality existing in the normal relations of his visual organs to the light: and in his idea, accordingly, there was nothing unreal, because he did not confuse the one relation with the other. Locke's doctrine, however, would allow of no distinction between the apparition as it was for such a man and as it would be for one who interpreted it as an actual 'ghost.' However interpreted, the liveliness and the involuntariness of the idea remain the same, as does its relation to an efficient cause. If in order to its reality the cause must be an 'outward body,' then it is no more real when rightly, than when wrongly, interpreted; while on the ground of liveliness and involuntariness it is as real when taken for a ghost as when referred to an excess of blood in the head.

Berkeley retains this notion, only sub-

189. As has been pointed out above, it is in respect not of the 'ratio cognoscendi' but of the 'ratio essendi' that Berkeley's doctrine of reality differs from Locke's. With him

it is not as an effect of an outward body, but as an immediate effect of God, that an 'idea of sense' is real. Just as with Locke real ideas and matter serve each to explain the other, so with Berkeley do real ideas and God. If he is asked, What is God? the answer is, He is the efficient cause of real ideas; if he is asked, What are real ideas? the answer is, Those which God produces, as opposed to those which we make for ourselves. To the inevitable objection, that this is a logical see-saw, no effective answer can be extracted from Berkeley but this—that we have subjective tests of the reality of ideas apart from a knowledge of their cause. In his account of these Berkeley only differs from Locke in adding to the qualifications of liveliness and involuntariness those of 'steadiness, order, and coherence' in the ideas. This addition may mean either a great deal or very little. To us it may mean that the distinction of real and unreal is one that applies not to feelings but to the conceived relations of feelings; not to events as such, but to the intellectual interpretation of them. The occurrence of a feeling taken by itself (it may be truly said) is neither coherent nor incoherent; nor can the sequence of feelings one upon another with any significance be called coherence, since in that case an incoherence would be as impossible as any failure in the sequence. As little can we mean by such coherence an usual, by incoherence an unusual, sequence of feelings. If we did, every sequence not before experienced—such, for instance, as is exhibited by a new scientific experiment—being unusual, would have to be pronounced incoherent, and therefore unreal. Coherence, in short, we may conclude, is only predicable of a system of relations, not felt but conceived; while incoherence arises from the attempt of an imperfect intelligence to think an object under relations which cannot ultimately be held together in thought. The qualification then of 'ideas' as coherent has in truth no meaning unless 'idea' be taken to mean not *feeling* but *conception*: and thus understood, the doctrine that coherent ideas *are* (Berkeley happily excludes the notion that they merely *represent*) the real, amounts to a clear identification of the real with the world of conception.

stituting 'God' for 'body.'

190. If such idealism were Berkeley's, his inference from the 'ideality' of the real to spirit and God would be more valid than it is. To have got rid of the notion that the

Not regarding the world as a system of

intelligible relations, he could not regard God as the subject of it.

world first exists and then is thought of—to have seen that it only really exists as thought of—is to have taken the first step in the only possible 'proof of the being of God,' as the self-conscious subject in relation to which alone an intelligible world can exist, and the presence of which in us is the condition of our knowing it.[1] But there is nothing to show that in adopting coherence as one test, among others, of the reality of ideas, he attached to it any of the significance exhibited above. He adopted it from ordinary language without considering how it affected his view of the world as a succession of feelings. That still remained to him a sufficient account of the world, even when he treated it as affording intuitive certainty of a soul 'naturally immortal,' and demonstrative certainty of God. He is not aware, while he takes his doctrine of such certainty from Locke, that he has left out, and not replaced, the only solid ground for it which Locke's system suggested.

His view of the soul as 'naturally immortal.'

191. The soul or self, as he describes it, does not differ from Locke's 'thinking substance,' except that, having got rid of 'extended matter' altogether, he cannot admit with Locke any possibility of the soul's being extended, and, having satisfied himself that 'time was nothing abstracted from the succession of ideas in the mind,'[2] he was clear that 'the soul always thinks'—since the time at which it did not think, being abstracted from a succession of ideas, would be no time at all. A soul which is necessarily unextended and therefore 'indiscerptible,' and without which there would be no time, he reckons 'naturally immortal.'

Endless succession of feelings is not immortality in true sense.

192. Upon this the remark must occur that, if the fact of being unextended constituted immortality, all sounds and smells must be immortal, and that the inseparability of time from the succession of feelings may prove that succession endless, but proves no immortality of a soul unless there be one self-conscious subject of that succession, identical with itself throughout it. To the supposition of there being such a subject, which Berkeley virtually makes, his own mode of disposing of matter suggested ready objections. In Locke, as we have seen, the two opposite 'things,' thinking and material, always appear in strict correlativity, each representing (though he was not aware of this) the same logical

[1] See above, paragraphs 146 and 149–152.

[2] 'Principles of Human Knowledge,' sec. 98.

Berkeley's doctrine of matter fatal to a true spiritualism;

necessity of substantiation. 'Sensation convinces us that there are solid extended substances, and reflection that there are thinking ones.' These are not two convictions, however, but one conviction, representing one and the same essential condition of knowledge. Such logical necessity indeed is misinterpreted when made a ground for believing the real existence either of a multitude of independent things, for everything is a 'retainer' to everything else;[1] or of a separation of the thinking from the material substance, since, according to Locke's own showing, they at least everywhere overlap;[2] or of an absolutely last substance, which because last would be unknowable: but it is evidence of the action of a synthetic principle of self-consciousness without which all reference of feelings to mutually-qualified subjects and objects, and therefore all knowledge, would be impossible. It is idle, however, with Berkeley so to ignore the action of this principle on the one side as to pronounce the material world a mere succession of feelings, and so to take it for granted on the other as to assert that every feeling implies relation to a conscious substance. Upon such a method the latter assertion has nothing to rest on but an appeal to the individual's consciousness—an appeal which avails as much or as little for material as for thinking substance, and, in face of the apparent fact that with a knock on the head the conscious independent substance may disappear altogether, cannot hold its own against the suggestion that the one substance no less than the other is reducible to a series of feelings, so closely and constantly sequent on each other as to seem to coalesce. We cannot substitute for this illusory appeal the valid method of an analysis of knowledge, without finding that substantiation in matter is just as necessary to knowledge as substantiation in mind. If this method had been Berkeley's he would have found a better plan for dealing with the 'materialism' in vogue. Instead of trying to show that material substance was a fiction, he would have shown that it was really a basis of intelligible relations, and that thus all that was fictitious about it was its supposed sensibility and consequent opposition to the work of thought. Then his doctrine of matter would itself have established the necessity of spirit, not indeed as substance but as the source of all substantiation. As it was, misunderstanding

[1] Above, paragraph 125.

[2] Above, paragraph 127.

the true nature of the antithesis between matter and mind, in his zeal against matter he took away the ground from under the spiritualism which he sought to maintain. He simply invited a successor in speculation, of colder blood than himself, to try the solution of spirit in the same crucible with matter.

as well as to a true Theism.

193. His doctrine of God is not only open to the same objection as his doctrine of spiritual substance, but to others which arise from the illogical restrictions that have to be put upon his notion of such substance, if it is to represent at once the God of received theology and the God whose agency the Berkeleian system requires as the basis of distinction between the real and unreal. Admitting the supposition involved in his certainty of the 'natural immortality' of the soul—the supposition that the succession of feelings which constitutes the world, and which at no time was not, implies one feeling substance—that substance we should naturally conclude was God. Such a God, it is true (as has been already pointed out),[1] would merely be the *μέγα ζῶον* of the crudest Pantheism, but it is the only God logically admissible—if any be admissible—in an 'ideal' system of which the text is not 'the world really exists only as thought of,' but 'the world only exists as a succession of feelings.' It was other than a *feeling* substance, however, that Berkeley required not merely to satisfy his religious instincts, but to take the place held by 'outward body' with Locke as the efficient of real ideas. The reference to this feeling substance, if necessary for any idea, is necessary for all—for the 'fantastic' as well as for those of sense—and can therefore afford no ground for distinction between the real and unreal. Instead, however, of being thus led to a truer view of this distinction, as in truth a distinction between the complete and incomplete conception of an intelligible world, he simply puts the feeling substance, when he regards it as God, under an arbitrary limitation, making it relative only to those ideas of which with Locke 'matter' was the substance, as opposed to those which Locke had referred to the thinking thing. The direct consequence of this limitation, indeed, might seem to be merely to make God an animal of partial, instead of universal, susceptibility; but this consequence Berkeley avoids by dropping the ordinary notion of substance altogether, so as to represent the ideas of

[1] See paragraph 180.

sense not as subsisting in God but as effects of His power—as related to Him, in short, just as with Locke ideas of sense are related to the primary qualities of matter. 'There must be an active power to produce our ideas, which is not to be found in ideas themselves, for we are conscious that they are inert, nor in matter, since that is but a name for a bundle of ideas; which must therefore be in spirit, since of that we are conscious as active; yet not in the spirit of which we are conscious, since then there would be no difference between real and imaginary ideas; therefore in a Divine Spirit, to whom, however, may forthwith be ascribed the attributes of the spirit of which we are conscious.' Such is the sum of Berkeley's natural theology.

His inference to God from necessity of a power to produce ideas;

194. From a follower of Hume it of course invites the reply that he does not see the necessity of an active power at all, to which, since, according to Berkeley's own showing, it is no possible 'idea' or object of an idea, all his own polemic against the 'absolute idea' of matter is equally applicable; that the efficient power, of which we profess to be conscious in ourselves, is itself only a name for a particular feeling or impression which precedes certain other of our impressions; that, even if it were more than this, the transition from the spiritual efficiency of which we are conscious to another, of which it is the special differentia that we are not conscious of it, would be quite illegitimate, and that thus in saying that certain feelings are real because, being lively and involuntary, they must be the work of this unknown spirit, we in effect say nothing more than that they are real because lively and involuntary. Against a retort of this kind Berkeley's theistic armour is even less proof than Locke's. His 'proof of the being of God' is in fact Locke's with the sole *nervus probandi* left out. The value of Locke's proof, as an argument from their being something now to their having been something from eternity, lay, we saw, in its convertibility into an argument from the world as a system of relations to a present and eternal subject of those relations. For its being so convertible there was this to be said, that Locke, with whatever inconsistency, at least recognised the constitution of reality by permanent relations, though he treated the mere relation of external efficiency—that in virtue of which we say of nature that it consists of bodies outward to and acting on each other—as if it alone constituted the reality of the world.

a necessity which Hume does not see.

A different turn should have been given to his idealism, if it was to serve his purpose.

Berkeley's reduction of the 'primary qualities of matter' to a succession of feelings logically effaces this relation, and puts nothing intelligible, nothing but a name, in its place. The effacement of the distinction between the real and unreal, which would properly ensue, is only prevented by bringing back relation to something under the name of God, either wholly unknown and indeterminate, or else, under a thin disguise, determined by that very relation of external efficiency which, when ascribed to something only nominally different, had been pronounced a gratuitous fiction. If Berkeley had dealt with the opposition of reality to thought by showing the primary qualities to be conceived relations, and the distinction between the real and unreal to be one between the fully and the defectively conceived, the case would have been different. The real and God would alike have been logically saved. The peculiar embarrassment of Locke's doctrine we have found to be that it involves the unreality of every object, into the constitution of which there enters any idea of reflection, or any idea retained in the mind, as distinct from the present effect of a body acting upon us—*i.e.* of every object of which anything can be said. With the definite substitution of full intelligibility of relations for present sensibility, as the true account of the real, this embarrassment would have been got rid of. At the same time there would have been implied an intelligent subject of these relations; the ascription to whom, indeed, of moral attributes would have remained a further problem, but who, far from being a 'Great Unknown,' would be at least determined by relation to that order of nature which is as necessary to Him as He to it. But in fact, as we have seen, the notion of the reality of relations, not felt but understood, only appears in Berkeley's developed philosophy as an after-thought, and the notion of an order of nature, other than our feelings, which enables us to infer what feelings that have never been felt would be, is an unexplained intrusion in it. The same is true of the doctrine, which struggles to the surface in the Third Dialogue, that the 'sensible world' is to God not felt at all, but known; that to Him it is precisely not that which according to Berkeley's refutation of materialism it really is—a series or collection of sensations. These 'after-thoughts,' when thoroughly thought out, imply a complete departure from Berkeley's original interpretation of 'phenomena' as

simple feelings; but with him, so far from being thought out, they merely suggested themselves incidentally as the conceptions of God and reality were found to require them. In other words, that interpretation of phenomena, which is necessary to any valid 'collection' from them of the existence of God, only appears in him as a consequence of that 'collection' having been made. To pursue the original interpretation, so that all might know what it left of reality, was the best way of deciding the question of its compatibility with a rational belief in God—a question of too momentous an interest to be fairly considered in itself. Thus to pursue it was the mission of Hume.

Hume's mission.

195. Hume begins with an account of the 'perceptions of the human mind,' which corresponds to Locke's account of ideas with two main qualifications, both tending to complete that dependence of thought on something other than itself which Locke had asserted, but not consistently maintained. He distinguishes 'perceptions' (equivalent to Locke's ideas) into 'impressions' and 'ideas' accordingly as they are originally produced in feeling or reproduced by memory and imagination, and he does not allow 'ideas of reflection' any place in the *original* 'furniture of the mind.' 'An impression first strikes upon the senses, and makes us perceive heat or cold, thirst or hunger, pleasure or pain, of some kind or other. Of this impression there is a copy taken by the mind, which remains after the impression ceases; and this we call an idea. This idea of pleasure or pain, when it returns upon the soul, produces the new impressions of desire and aversion, hope and fear, which may properly be called impressions of reflection, because derived from it. These, again, are copied by the memory and imagination, and become ideas; which, perhaps, in their turn give rise to other impressions and ideas; so that the impressions are only antecedent to their correspondent ideas, but posterior to those of sensation and derived from them' (Part I. §2). He is at the same time careful to explain that the causes from which the impressions of sensation arise are unknown (ibid.), and that by the term 'impression' he is not to be 'understood to express the manner in which our lively perceptions are produced in the soul, but merely the perceptions themselves' (p. 312, note). The distinction between impression and idea he treats as equivalent to that between feeling and thinking, which, again,

His account of impressions and ideas.

lies merely in the different degrees of 'force and liveliness' with which the perceptions, thus designated, severally 'strike upon the mind.'[1] Thus the rule which he emphasises (p. 310) 'that all our simple ideas in their first appearance are derived from simple impressions which are correspondent to them and which they exactly represent,' strictly taken, means no more than that a feeling must be more lively before it becomes less so. As the reproduced perception, or 'idea,' differs in this respect from the original one, so, according to the greater or less degree of secondary liveliness which it possesses, is it called 'idea of memory,' or 'idea of imagination.' The only other distinction noticed is that, as might be expected, the comparative faintness of the ideas of imagination is accompanied by a possibility of their being reproduced in a different order from that in which the corresponding ideas were originally presented. Memory, on the contrary, 'is in a manner tied down in this respect, without any power of variation' (p. 318); which must be understood to mean that, when the ideas are faint enough to allow of variation in the order of reproduction, they are not called 'ideas of memory.'

Ideas are fainter impressions.

196. All, then, that Hume could find in his mind, when after Locke's example he 'looked into it,' were, according to his own statement, feelings with their copies, dividing themselves into two main orders—those of sensation and those of reflection, of which the latter, though results of the former, are not their copies. The question, then, that he had to deal with was, to what impressions he could reduce those conceptions of relation—of cause and effect, substance and attribute, and identity—which all knowledge involves. Failing the impressions of sensation he must try those of reflection, and failing both he must pronounce such conceptions to be no 'ideas' at all, but words misunderstood, and leave knowledge to take its chance. The vital nerve of his philosophy lies in his treatment of the 'association of ideas' as a sort of process of spontaneous generation, by which impressions of sensation issue in such impressions of reflection, in the shape of habitual propensities,[2] as will account, not indeed for there being—since there really are not—but for there seeming to be, those formal conceptions which Locke, to the embarrassment of

'Ideas' that cannot be so represented must be explained as mere words.

[1] See pp. 327 and 375.

[2] Pp. 460 and 496.

his philosophy, had treated as at once real and creations of the mind.

Hume, taken strictly, leaves no distinction between impressions of reflection and of sensation.

197. Such a method meets at the outset with the difficulty that the impressions of sensation and those of reflection, if Locke's determination of the former by reference to an impressive matter is excluded, are each determined only by reference to the other. What is an impression of reflection? It is one that can only come after an impression of sensation. What is an impression of sensation? It is one that comes before any impression of reflection. An apparent determination, indeed, is gained by speaking of the original impressions as 'conveyed to us by our senses;' but this really means determination by reference to the organs of our body as affected by outward bodies—in short, by a physical theory. But of the two essential terms of this theory, 'our own body,' and 'outward body,' neither, according to Hume, expresses anything present to the original consciousness. 'Properly speaking, it is not our body we perceive when we regard our limbs and members, but certain impressions which enter by the senses.' Nor do any of our impressions 'inform us of distance and outness (so to speak) immediately, and without a certain reasoning and experience' (p. 481). In such admissions Hume is as much a Berkeleian as Berkeley himself, and they effectually exclude any reference to body from those original impressions, by reference to which all other modes of consciousness are to be explained.

Locke's theory of sensation disappears.

198. He thus logically cuts off his psychology from the support which, according to popular conceptions, its primary truths derive from physiology. We have already noticed how with Locke metaphysic begs defence of physic;[1] how, having undertaken to answer by the impossible method of self-observation the question as to what consciousness is to itself at its beginning, he in fact tells us what it is to the natural philosopher, who accounts for the production of sensation by the impact of matter 'on the outward parts, continued to the brain.' To those, of course, who hold that the only possible theory of knowledge and of the human spirit is physical, it must seem that this was his greatest merit; that, an unmeaning question having been asked, it was the best thing to give an answer which indeed is no answer to

[1] See above, paragraph 17.

the question, but has some elementary truth of its own. According to them, though he may have been wrong in supposing consciousness to be to itself what the physiologist explains it to be—since any supposition at all about it except as a phenomenon, to which certain other phenomena are invariably antecedent, is at best superfluous—he was not wrong in taking the physiological explanation to be the true and sufficient one. To such persons we can but respectfully point out that they have not come in sight of the problem which Locke and his followers, on however false a method, sought to solve; that, however certain may be the correlation between the brain and thought, in the sense that the individual would be incapable of the processes of thought unless he had brain and nerves of a particular sort, yet it is equally certain that every theory of the correlation must presuppose a knowledge of the processes, and leave that knowledge exactly where it was before; that thus their science, valuable like every other science within its own department, takes for granted just what metaphysic, as a theory of knowledge, seeks to explain. When the origin, for instance, of the conception of body or of that of an organic structure is in question, it is in the strictest sense preposterous to be told that body makes the conception of body, and that unless the brain were organic to thought I should not now be thinking. 'The brain is organic to thought;' here is a proposition involving conceptions within conceptions—a whole hierarchy of ideas. How am I enabled to re-think these in order, to make my way from the simpler to the more complex, by any iteration or demonstration of the proposition, which no one disputes, or by the most precise examination of the details of the organic structure itself?

Physiology won't answer the question that Locke asked.

199. The quarrel of the physiologist with the metaphysician is, in fact, due to an *ignorantia elenchi* on the part of the former, for which the behaviour of English 'metaphysicians,' in attempting to assimilate their own procedure to that of the natural philosophers, and thus to win the popular acceptance which these alone can fairly look for, has afforded too much excuse. The question really at issue is not between two co-ordinate sciences, as if a theory of the human body were claiming also to be a theory of the human soul, and the theory of the soul were resisting the aggression. The question is, whether the conceptions which all the departmental

Those who think it will don't understand the question.

sciences alike presuppose shall have an account given of them or no. For dispensing with such an account altogether (life being short) there is much to be said, if only men would or could dispense with it; but the physiologist, when he claims that his science should supersede metaphysic, is not dispensing with it, but rendering it in a preposterous way. He accounts for the formal conceptions in question, in other words for thought as it is common to all the sciences, as sequent upon the antecedent facts which his science ascertains—the facts of the animal organisation. But these conceptions—the relations of cause and effect, &c.—are necessary to constitute the facts. They are not an *ex post facto* interpretation of them, but an interpretation without which there would be no ascertainable facts at all. To account for them, therefore, as the result of the facts is to proceed as a geologist would do, who should treat the present conformation of the earth as the result of a certain series of past events, and yet, in describing these, should assume the present conformation as a determining element in each.

Hume's psychology will not answer it either.

200. 'Empirical psychology,' however, claims to have a way of its own for explaining thought, distinct from that of the physiologist, but yet founded on observation, though it is admitted that the observation takes place under difficulties. Its method consists in a history of consciousness, as a series of events or successive states observed in the individual by himself. By tracing such a chain of *de facto* sequence it undertakes to account for the elements common to all knowledge. Its first concern, then, must be, as we have previously put it, to ascertain what consciousness is to itself at its beginning. No one with Berkeley before him, and accepting Berkeley's negative results, could answer this question in Locke's simple way by making the primitive consciousness report itself as an effect of the operation of body. To do so is to transfer a later and highly complex form of consciousness, whose growth has to be traced, into the earlier and simple form from which the growth is supposed to begin. This, upon the supposition that the process of consciousness by which conceptions are formed is a series of psychical events—a supposition on which the whole method of empirical psychology rests—is in principle the same false procedure as that which we have imagined in the case of a

geologist above. But the question is whether, by any procedure not open to this condemnation, the theory could seem to do what it professes to do—explain thought or 'cognition by means of conceptions' as something which happens in sequence upon previous psychical events. Does it not, however stated, carry with it an implication of the supposed later state in the earlier, and is it not solely in virtue of this implication that it seems to be able to trace the genesis of the later? No one has pursued it with stricter promises, or made a fairer show of being faithful to them, than Hume. He will begin with simple feeling, as first experienced by the individual—unqualified by complex conceptions, physical or metaphysical, of matter or of mind—and trace the process by which it generates the 'ideas of philosophical relation.' If it can be shown, as we believe it can be, that, even when thus pursued, its semblance of success is due to the fact that, by interpreting the earliest consciousness in terms of the latest, it puts the latter in place of the former, some suspicion may perhaps be created that a natural history of self-consciousness, and of the conceptions by which it makes the world its own, is impossible, since such a history must be of events, and self-consciousness is not reducible to a series of events; being already at its beginning formally, or potentially, or implicitly all that it becomes actually or explicitly in developed knowledge.

It only seems to do so by assuming the 'fiction' it has to account for;

201. If Hume were consistent in allowing no other determination to the impression than that of its having the maximum of vivacity, or to other modes of consciousness than the several degrees of their removal from this maximum, he would certainly have avoided the difficulties which attend Locke's use of the metaphor of impression, while at the same time he would have missed the convenience, involved in this use, of being able to represent the primitive consciousness as already a recognition of a thing impressing it, and thus an 'idea of a quality of body.' But at the outset he remarks that 'the examination of our sensations' (*i.e.* our impressions of sensation) 'belongs more to anatomists and natural philosophers than to moral,' and that for that reason he shall begin not with them but with ideas (p. 317). Now this virtually means that he will begin, indeed, with the feelings he finds in himself, but with these as determined by the notion that they are results of something else, of which the nature

is not for the present explained. Thus, while he does not, like Locke, identify our earliest consciousness with a rough and ready physical theory of its cause, he gains the advantage of this identification in the mind of his reader, who from sensation, thus apparently defined, transfers a definiteness to the ideas and secondary impressions as derived from it, though in the sequel the theory turns out, if possible at all, to be at best a remote result of custom and association. We shall see this more clearly if we look back to the general account of impressions and ideas quoted above. 'An impression first strikes upon the senses and makes us perceive pleasure or pain, of which a copy is taken by the mind,' called an idea. Now if we set aside the notion of a body making impact upon a sensuous, and through it upon a mental, tablet, pleasure or pain *is* the impression, which, again, is as much or as little in the mind as the idea. Thus the statement might be re-written as follows:—'Pleasure or pain makes the mind perceive pleasure or pain, of which a copy is taken by the mind.' This, of course, is nonsense; but between this nonsense and the plausibility of the statement as it stands, the difference depends on the double distinction understood in the latter—the distinction (*a*) between the producing cause of the impression and the impression produced; and (*b*) between the impression as produced on the senses, and the idea as preserved by the mind. This passage, as we shall see, is only a sample of many of the same sort. Throughout, however explicitly Hume may give warning that the difference between impression and idea is only one of liveliness, however little he may scruple in the sequel to reduce body and mind alike to the succession of feelings, his system gains the benefit of the contrary assumption which the uncritical reader is ready to make for him. As often as the question returns whether a phrase, purporting to express an 'abstract conception,' expresses any actual idea or no, his test is, 'Point out the impression from which the idea, if there be any, is derived'—a test which has clearly no significance if the impression is merely the idea itself at a livelier stage (for a person, claiming to have the idea, would merely have to say that he had never known it more lively, and that, therefore, it was itself an impression, and the force of the test would be gone), but which seems so satisfactory because the impres-

by assuming that impression represents a real world.

sion is regarded as the direct effect of outward things, and thus as having a prerogative of reality over any perception to which the mind contributes anything of its own. By availing himself alternately of this popular conception of the impression of sensation and of his own account of it, he gains a double means of suppressing any claim of thought to originate. Every idea, by being supposed in a more lively state, can be represented as derived from an impression, and thus (according to the popular notion) as an effect of something which, whatever it is, is not thought. If thereupon it is pointed out that this outward something is a form of substance which, according to Hume's own showing, is a fiction of thought, there is an easy refuge open in the reply that 'impression' is only meant to express a lively feeling, not any dependence upon matter of which we know nothing.

So the 'Positivist' juggles with 'phenomena.'

202. Thus the way is prepared for the juggle which the modern popular logic performs with the word 'phenomenon' —a term which gains acceptance for the theory that turns upon it because it conveys the notion of a relation between a real order and a perceiving mind, and thus gives to those who avail themselves of it the benefit of an implication of the 'noumena' which they affect to ignore. Hume's inconsistency, however, stops far short of that of his later disciples. For the purpose of detraction from the work of thought he availed himself, indeed, of that work as embodied in language, but only so far as was necessary to his destructive purpose. He did not seriously affect to be reconstructing the fabric of knowledge on a basis of fact. There occasionally appears in him, indeed, something of the charlatanry of common sense in passages, more worthy of Bolingbroke than himself, where he writes as a champion of facts against metaphysical jargon. But when we get behind the mask of concession to popular prejudice, partly ironical, partly due to his undoubted vanity, we find much more of the ancient sceptic than of the 'positive philosopher.'

Essential difference, however, between Hume and the 'Positivist.'

203. The ancient sceptic (at least as represented by the ancient philosophers), finding knowledge on the basis of distinction between the real and apparent to be impossible, discarded the enterprise of arriving at general truth in opposition to what appears to the individual at any particular instant, and satisfied himself with noting such general tendencies of expectation and desire as would guide men in the

conduct of life and enable them to get what they wanted by contrivance and persuasion.[1] Such a state of mind excludes all motive to the 'interrogation of nature,' for it recognises no 'nature' but the present appearance to the individual; and this does not admit of being interrogated. The 'positive philosopher' has nothing in common with it but the use, in a different sense, of the word 'apparent.' He plumes himself, indeed, on not going in quest of any 'thing-in-itself' other than what appears to the senses; but he distinguishes between a real and apparent in the order of appearance, and considers the real order of appearance, having a permanence and uniformity which belong to no feeling as the individual feels it, to be the true object of knowledge. No one is more severe upon 'propensities to believe,' however spontaneously suggested by the ordinary sequence of appearances, if they are found to conflict with the order of nature as ascertained by experimental interrogation; *i.e.* with a sequence observed (it may be) in but a single instance. Which of the two attitudes of thought is the more nearly Hume's, will come out as we proceed. It was just with the distinction between the 'real and fantastic,' as Locke had left it, that he had to deal; and, as will appear, it is finally by a 'propensity to feign,' not by a uniform order of natural phenomena, that he replaces the real which Locke, according to his first mind, had found in archetypal things and their operations on us.

He adopts Berkeley's doctrine of ideas, but without Berkeley's saving suppositions,

204. We have seen that Berkeley, having reduced 'simple ideas' to their simplicity by showing the illegitimacy of the assumption that they report qualities of a matter which is itself a complex idea, is only able to make his constructive theory march by the supposition of the reality and knowability of 'spirit' and relations. 'Ideas' are 'fleeting, perishable passions;' but the relations between them are uniform, and in virtue of this uniformity the fleeting idea may be interpreted as a symbol of a real order. But such relations, as real, imply the presence of the ideas to the constant mind of God, and, as knowable, their presence to a like mind in us. We have further seen how little Berkeley, according to the method by which he disposed of 'abstract general ideas,' was entitled to such a supposition. Hume sets it aside; but the

[1] Cf. Plato's 'Protagoras,' 323, and 'Theætatus,' 167, with the concluding paragraphs of the last part of the first book of Hume's 'Treatise on Human Nature.'

question is, whether without a supposition virtually the same he can represent the association of ideas as doing the work that he assigned to it.

in regard to 'spirit,'

205. His exclusion of Berkeley's supposition with regard to 'spirit' is stated without disguise, though unfortunately not till towards the end of the first book of the 'Treatise on Human Nature,' which could not have run so smoothly if the statement had been made at the beginning. It follows legitimately from the method, which he inherited, of 'looking into his mind to see how it wrought.' 'From what impression,' he asks, 'could the idea of self be derived? It must be some one impression that gives rise to every real idea. But self or person is not any impression, but that to which our several impressions and ideas are supposed to have a reference. If any impression gives rise to the idea of self, that impression must continue invariably the same through the whole course of our lives, since self is supposed to exist after that manner. But there is no impression constant and invariable. Pain and pleasure, grief and joy, passions and sensations succeed each other, and never all exist at the same time. It cannot, therefore, be from any of these impressions, or from any other, that the idea of self is derived; and, consequently, there is no such idea.' Again: 'When I enter most intimately into what is called myself, I always stumble on some particular perception of heat or cold, light or shade, love or hatred, pain or pleasure. I never can catch myself at any time without a perception, and never can observe anything but the perception. When my perceptions are removed for any time, as by sound sleep, so long am I insensible of myself, and may truly be said not to exist.' Thus 'men are nothing but a bundle or collection of different perceptions that succeed each other with inconceivable rapidity, and are in a perpetual flux or movement. Our eyes cannot turn in their sockets without varying our perceptions. Our thought is still more variable than our sight. . . . nor is there any single power of the soul which remains unalterably the same perhaps for one moment. . . . There is properly no simplicity in the mind at one time nor identity at different' (pp. 533 and 534).

in regard to relations.

206. His position in regard to ideas of relation cannot be so summarily exhibited. It is from its ambiguity, indeed, that his system derives at once its plausibility and its weak-

ness. In the first place, it is necessary, according to him, to distinguish between 'natural' and 'philosophical relation.' The latter is one of which the idea is acquired by the comparison of objects, as distinct from natural relation or 'the quality by which two ideas are connected together in the imagination, and the one naturally' (*i.e.* according to the principle of association) 'introduces the other' (p. 322). Of philosophical relation—or, according to another form of expression, of 'qualities by which the ideas of philosophical relation are produced'—seven kinds are enumerated; viz. 'resemblance, identity, relations of time and place, proportion in quantity and number, degrees in quality, contrariety, and causation' (ibid., and p. 372). Some of these do, some do not, *apparently* correspond to the qualities by which the mind is *naturally* 'conveyed from one idea to another;' or which, in other words, constitute the 'gentle force' that determines the order in which the imagination habitually puts together ideas. Freedom in the conjunction of ideas, indeed, is implied in the term 'imagination,' which is only thus differenced from 'memory;' but, as a matter of fact, it commonly only connects ideas which are related to each other in the way either of resemblance, or of contiguity in time and place, or of cause and effect. Other relations of the philosophical sort are the opposite of *natural*. Thus, 'distance will be allowed by philosophers to be a true relation, because we acquire an idea of it by the comparing of objects; but in a common way we say, "that nothing can be more distant than such or such things from each other; nothing can have less relation"' (ibid.).

His account of these.

207. Hume's classification of philosophical relations evidently serves the same purpose as Locke's, of the 'four sorts of agreement or disagreement between ideas,' in the perception of which knowledge consists;[1] but there are some important discrepancies. Locke's second sort, which he awkwardly describes as 'agreement or disagreement in the way of relation,' may fairly be taken to cover three of Hume's kinds; viz. relations of time and place, proportion in quantity or number, and degrees in any quality. About Locke's first sort, 'identity and diversity,' there is more difficulty. Under 'identity,' as was pointed out above, he includes the

It corresponds to Locke's account of the sorts of agreement between ideas.

[1] See above, paragraph 25 and the passages from Locke there referred to.

relations which Hume distinguishes as 'identity proper' and 'resemblance.' 'Diversity' at first sight might seem to correspond to 'contrariety;' but the latter, according to Hume's usage, is much more restricted in meaning. Difference of number and difference of kind, which he distinguishes as the opposites severally of identity and resemblance, though they come under Locke's 'diversity,' are not by Hume considered relations at all, on the principle that 'no relation of any kind can subsist without some degree of resemblance.' They are 'rather a negation of relation than anything real and positive.' 'Contrariety' he reckons only to obtain between ideas of existence and non-existence, 'which are plainly resembling as implying both of them an idea of the object; though the latter excludes the object from all times and places in which it is supposed not to exist' (p. 323). There remain 'cause and effect' in Hume's list; 'co-existence' and 'real existence' in Locke's. 'Co-existence' is not expressly identified by Locke with the relation of cause and effect, but it is with 'necessary connection.' It means specially, it will be remembered,[1] the co-existence of ideas, not as constituents of a 'nominal essence,' but as qualities of real substances in nature; and our knowledge of this depends on our knowledge of necessary connection between the qualities, either as one supposing the other (which is the form of necessary connection between primary qualities), or as one being the effect of the other (which is the form of necessary connection between the ideas of secondary qualities and the primary ones). Having no knowledge of necessary connection as in real substances, we have none of 'co-existence' in the above sense, but only of the present union of ideas in any particular experiment.[2] The parallel between this doctrine of Locke's and Hume's of cause and effect will appear as we proceed. To 'real existence,' since the knowledge of it according to Locke's account is not a perception of agreement between ideas at all, it is not strange that nothing should correspond in Hume's list of relations.

Could Hume consistently admit idea of relation at all?

208. It is his method of dealing with these ideas of philosophical relation that is specially characteristic of Hume. Let us, then, consider how the notion of relation altogether is affected by his reduction of the world of consciousness to

[1] See above, paragraph 122.
[2] Locke, Book IV. sec. iii. chap. xiv.; and above, paragraph 121 and 122.

impressions and ideas. What is an impression? To this, as we have seen, the only direct answer given by him is that it is a feeling which must be more lively before it becomes less so.[1] For a further account of what is to be understood by it we must look to the passages where the governing terms of 'school-metaphysics' are, one after the other, shown to be unmeaning, because not taken from impressions. Thus, when the idea of substance is to be reduced to an 'unintelligible chimæra,' it is asked whether it 'be derived from the impressions of sensation or reflection? If it be conveyed to us by our senses, I ask, which of them, and after what manner? If it be perceived by the eyes, it must be a colour; if by the ears, a sound; if by the palate, a taste; and so of the other senses. But I believe none will assert that substance is either a colour, or a sound, or a taste. The idea of substance must therefore be derived from an impression of reflection, if it really exist. But the impressions of reflection resolve themselves into our passions and emotions' (p. 324). From the polemic against abstract ideas we learn further that 'the appearance of an object to the senses' is the same thing as an 'impression becoming present to the mind' (p. 327). That is to say, when we talk of an impression of an object, it is not to be understood that the feeling is determined by reference to anything other than itself: it is itself the object. To the same purpose, in the criticism of the notion of an external world, we are told that 'the senses are incapable of giving rise to the notion of the continued existence of their objects, after they no longer appear to the senses; for that is a contradiction in terms' (since the appearance *is* the object); and that 'they offer not their impressions as the images of something distinct, or independent, or external, because they convey to us nothing but a single perception, and never give us the least intimation of anything beyond' (p. 479). The distinction between impression of sensation and impression of reflection, then, cannot, any more than that between impression and idea, be regarded as either really or apparently a distinction between outer and inner. 'All impressions are internal and perishing existences' (p. 483); and, 'everything that enters the mind being in reality as the impression, 'tis impossible anything should to feeling appear different' (p. 480).

[1] See above, paragraphs 195 and 197.

209. This amounts to a full acceptance of Berkeley's doctrine of sense; and the question necessarily arises—such being the impression, and all ideas being impressions grown weaker, can there be an idea of relation at all? Is it not open to the same challenge which Hume offers to those who talk of an idea of substance or of spirit? 'It is from some one impression that every real idea is derived.' What, then, is the one impression from which the idea of relation is derived? 'If it be perceived by the eyes, it must be a colour; if by the ears, a sound; if by the palate, a taste; and so of the other senses.' There remain 'our passions and emotions;' but what passion or emotion is a resemblance, or a proportion, or a relation of cause and effect?

Only in regard to identity and causation that he sees any difficulty.

These he treats as fictions resulting from 'natural relations' of ideas;

210. Respect for Hume's thoroughness as a philosopher must be qualified by the observation that he does not attempt to meet this difficulty in its generality, but only as it affects the relations of identity and causation. The truth seems to be that he wrote with Berkeley steadily before his mind; and it was Berkeley's treatment of these two relations in particular as not sensible but intelligible, and his assertion of a philosophic Theism on the strength of their mere intelligibility, that determined Hume, since it would have been an anachronism any longer to treat them as sensible, to dispose of them altogether. The condition of his doing so with success was that, however unwarrantably, he should treat the other relations as sensible. The language, which seems to express ideas of the two questionable relations, he has to account for as the result of certain impressions of reflection, called 'propensities to feign,' which in their turn have to be accounted for as resulting from the *natural* relations of ideas according to the definition of these quoted above,[1] as 'the qualities by which one idea habitually introduces another.' Among these, as we saw, he included not only resemblance and contiguity in time or place, but 'cause and effect.' 'There is no relation,' he says, 'which produces a stronger connection in the fancy than this.' But in this, as in much of the language which gives the first two Parts their plausibility, he is taking advantage of received notions on the part of the reader, which it is the work of the rest of the book to set aside. In any sense, according to him, in which it differs

[1] See above, paragraph 206.

from usual contiguity, the relation of cause and effect is itself reducible to a 'propensity to feign,' arising from the other natural relations; but when the reader is told of its producing 'a strong connection in the fancy,' he is not apt to think of it as itself nothing more than the product of such a connection. For the present, however, we have only to point out that Hume, when he co-ordinates it with the other natural relations, must be understood to do so provisionally. According to him it is derived, while they are primary. Upon them, then, rested the possibility of filling the gap between the occurrence of single impressions, none 'determined by reference to anything other than itself,' and what we are pleased to call our knowledge, with its fictions of mind and thing, of real and apparent, of necessary as distinct from usual connection.

i.e. from resemblance and contiguity.

211. We will begin with Resemblance. As to this, it will be said, it is an affectation of subtlety to question whether there can be an impression of it or no. The difficulty only arises from our regarding the perception of resemblance as different from, and subsequent to, the resembling sensations; whereas, in fact, the occurrence of two impressions of sense, such as (let us say) yellow and red, is itself the impression of their likeness and unlikeness. Hume himself, it may be further urged, at any rate in regard to resemblance, anticipates this solution of an imaginary difficulty by his important division of philosophical relations into two classes (p. 372)—such as depend entirely on the ideas which we compare together, and such as may be changed without any change in the ideas'—and by his inclusion of resemblance in the former class.

Is resemblance then an impression?

212. Now we gladly admit the mistake of supposing that sensations undetermined by relation first occur, and that afterwards we become conscious of their relation in the way of likeness or unlikeness. Apart from such relation, it is true, the sensations would be nothing. But this admission involves an important qualification of the doctrine that impressions are single, and that the mind (according to Hume's awkward figure) is a 'bundle or collection of these,' succeeding each other 'in a perpetual flux or movement.' It implies that the single impression in its singleness is what it is through relation to another, which must there-

fore be present along with it; and that thus, though they may occur in a perpetual flux of succession—every turn of the eyes in their sockets, as Hume truly says, giving a new one—yet, just so far as they are qualified by likeness or unlikeness to each other, they must be taken out of that succession by something which is not itself in it, but is indivisibly present to every moment of it. This we may call soul, or mind, or what we will; but we must not identify it with the brain[1] either directly or by implication (as we do when we 'refer to the anatomist' for an account of it), since by the brain is meant something material, *i.e.* divisible, which the unifying subject spoken of, as feeling no less than as thinking, cannot be. In short, any such modification of Hume's doctrine of the singleness and successiveness of impressions as will entitle us to speak of their carrying with them, though single and successive, the consciousness of their resemblance to each other, will also entitle us to speak of their carrying with them a reference to that which is not itself any single impression, but is permanent throughout the impressions; and the whole ground of Hume's polemic against the idea of self or spirit is removed.[2]

Distinction between resembling feelings and idea of resemblance.

213. The above admission, however, does not dispose of the question about ideas of resemblance. A feeling qualified by relation of resemblance to other feelings is a different thing from an idea of that relation—different with all the difference which Hume ignores between feeling and thought, between consciousness and self-consciousness. The qualification of successive feelings by mutual relation implies, indeed, the presence to them of a subject permanent and immaterial (*i. e.* not in time or space); but it does not imply that this subject presents them to itself as related objects, permanent with its own permanence, which abide and may be considered apart from 'the circumstances in time' of their occurrence. Yet such presentation is supposed by all language other than interjectional. It is it alone which can give us names of things, as distinct from noises prompted by the feelings as they occur. Of course it is open to any one to *say* that by an idea of resemblance he does not mean any thought involving the self-conscious presentation spoken of, but merely a feeling qualified by resemblance, and not at its

[1] It is, of course, quite a different thing to say that the brain (or, more properly, the whole body) is organic to it.

[2] See above, paragraph 205.

liveliest stage. Thus Hume tells us that by 'idea' he merely means a feeling less lively than it has been, and that by idea *of anything* he implies no reference to anything other than the idea,[1] but means just a related idea, *i.e.* a feeling qualified by 'natural relation' to other feelings. It is by this thoughtful abnegation of thought, as we shall find, that he arrives at his sceptical result. But language (for the reason mentioned) would not allow him to be faithful to the abnegation. He could not make such a profession without being false to it. This appears already in his account of 'complex' and 'abstract' ideas.

Substances —collections of ideas.

214. His account of the idea of a substance (p. 324) is simply Locke's, as Locke's would become upon elimination of the notion that there is a real 'something' in which the collection of ideas subsist, and from which they result. It thus avoids all difficulties about the relation between nominal and real essence. Just as Locke says that in the case of a 'mixed mode' the nominal essence *is* the real, so Hume would say of a substance. The only difference is that while the collection of ideas, called a mixed mode, does not admit of addition without a change of its name, that called a substance does. Upon discovery of the solubility of gold in aqua regia we add that idea to the collection, to which the name 'gold' has previously been assigned, without disturbance in the use of the name, because the name already covers not only the ideas of certain qualities, but also the idea of a 'principle of union' between them, which will extend to any ideas presented along with them. As this principle of union, however, is not itself any 'real essence,' but 'part of the complex idea,' the question, so troublesome to Locke, whether a proposition about gold asserts real co-existence or only the inclusion of an idea in a nominal essence, will be superfluous. How the 'principle of union' is to be explained, will appear below.[2]

How can ideas 'in flux' be collected?

215. There are names, then, which represent 'collections of ideas.' How can we explain such collection if ideas are merely related feelings grown fainter? Do we, when we use one of these names significantly, recall, though in a fainter form, a series of feelings that we have experienced in the process of collection? Does the chemist, when he says that gold is soluble in aqua regia, recall the visual and tactual

[1] See above, paragraph 208.

[2] Paragraph 303, and the following.

feeling which he experienced when he found it soluble? If so, as that feeling took its character from relation to a multitude of other 'complex ideas,' he must on the same principle recall in endless series the sensible occurrences from which each constituent of each constituent of these was derived; and a like process must be gone through when gold is pronounced ductile, malleable, &c. But this would be, according to the figure which Hume himself adopts, to recall a 'perpetual flux.' The very term 'collection of ideas,' indeed, if this be the meaning of ideas, is an absurdity, for how can a perpetual flux be collected? If we turn for a solution of the difficulty to the chapter where Hume expressly discusses the significance of general names, we shall find that it is not the question we have here put, and which flows directly from his account of ideas, that he is there treating, but an entirely different one, and one that could not be raised till for related feeling had been substituted the thought of an object under relations.

Are there general ideas? Berkeley said, 'yes and no.'

216. The chapter mentioned concerns the question which arises out of Locke's pregnant statement that words and ideas are 'particular in their existence' even when 'general in their signification.' From this statement we saw[1] that Berkeley derived his explanation of the apparent generality of ideas—the explanation, namely, which reduces it to a relation, yet not such a one as would affect the nature of the idea itself, which is and remains 'particular,' but a symbolical relation between it and other particular ideas for which it is taken to stand. An idea, however, that carries with it a consciousness of symbolical relation to other ideas, cannot but be qualified by this relation. The generality must become part of its 'nature,' and, accordingly, the distinction between idea and thing being obliterated, of the nature of things. Thus Berkeley virtually arrives at a result which renders unmeaning his preliminary exclusion of universality from 'the absolute, positive nature or conception of anything.' Hume seeks to avoid it by putting 'custom' in the place of the consciousness of symbolical relation. True to his vocation of explaining away all functions of thought that will not sort with the treatment of it as 'decaying sense,' he would resolve that idea of a relation between certain ideas, in virtue of which one is taken to stand for the rest, into the *de facto*

[1] Above, paragraphs 182 and 183.

sequence upon one of them of the rest. Here, as everywhere else, he would make related feelings do instead of relations of ideas; but whether the related feelings, as he is obliged to describe them, do not already presuppose relations of ideas in distinction from feelings, remains to be seen.

Hume 'no' simply.

217. The question about 'generality of signification,' as he puts it, comes to this. In every proposition, though its subject be a common noun, we necessarily present to ourselves some one individual object 'with all its particular circumstances and proportions.' How then can the proposition be general in denotation and connotation? How can it be made with reference to a multitude of individual objects other than that presented to the mind, and how can it concern only such of the qualities of the latter as are common to the multitude? The first part of the question is answered as follows:—

How he accounts for the appearance of their being such.

'When we have found a resemblance among several objects that often occur to us, we apply the same name to all of them . . . whatever differences may appear among them. After we have acquired a custom of this kind, the hearing of that name revives the idea of one of these objects, and makes the imagination conceive it with all its particular circumstances and proportions. But as the same word is supposed to have been frequently applied to other individuals, that are different in many respects from that idea which is immediately present to the mind, the word not being able to revive the idea of all these individuals, only touches the soul and revives that custom which we have acquired by surveying them. They are not really and in fact present to the mind, but only in power. . . . The word raises up an individual idea along with a certain custom, and that custom produces any other individual one for which we may have occasion. . . . Thus, should we mention the word triangle and form the idea of a particular equilateral one to correspond to it, and should we afterwards assert *that the three angles of a triangle are equal to each other*, the other individuals of a scalenum and isosceles, which we overlooked at first, immediately crowd in upon us and make us perceive the falsehood of this proposition, though it be true with relation to that idea which we had formed' (p. 328).

218. Next, as to the question concerning connotation:—'The mind would never have dreamed of distinguishing a figure from the body figured, as being in reality neither distin-

guishable nor different nor separable, did it not observe that even in this simplicity there might be contained many different resemblances and relations. Thus, when a globe of white marble is presented, we receive only the impression of a white colour disposed in a certain form, nor are we able to distinguish and separate the colour from the form. But observing afterwards a globe of black marble and a cube of white, and comparing them with our former object, we find two separate resemblances in what formerly seemed, and really is, perfectly inseparable. After a little more practice of this kind, we begin to distinguish the figure from the colour by a *distinction of reason*;—*i.e.* we consider the figure and colour together, since they are, in effect, the same and indistinguishable; but still view them in different aspects according to the resemblances of which they are susceptible. . . . A person who desires us to consider the figure of a globe of white marble without thinking on its colour, desires an impossibility; but his meaning is, that we should consider the colour and figure together, but still keep in our eye the resemblance to the globe of black marble or that to any other globe whatever' (p. 333).

His account implies that 'ideas' are conceptions, not feelings.

219. It is clear that the process described in these passages supposes 'ab initio' the conversion of a feeling into a conception; in other words, the substitution of the definite individuality of a thing, thought of under attributes, for the mere singleness in time of a feeling that occurs after another and before a third. The 'finding of resemblances and differences among objects that often occur to us' implies that each object is distinguished as one and abiding from manifold occurrences, in the way of related feelings, in which it is presented to us, and that these accordingly are regarded as representing permanent relations or qualities of the object. Thus from being related feelings, whether more or less 'vivacious,' they have become, in the proper sense, ideas of relation. The difficulty about the use of general names, as Hume puts it, really arises just from the extent to which this process of determination by ideas of relation, and with it the removal of the object of thought from simple feeling, is supposed to have gone. It is because the idea is so complex in its individuality, and because this qualification is not understood to be the work of thought, by comparison and

contrast accumulating attributes on an object which it itself constitutes, but is regarded as given ready-made in an impression (*i.e.* a feeling), that the question arises whether a general proposition is really possible or no. To all intents and purposes Hume decides that it is not. The mind is so tied down to the particular collection of qualities which is given to it or which it 'finds,' that it cannot present one of them to itself without presenting all. Having never found a triangle that is not equilateral or isosceles or scaline, we cannot imagine one, for ideas can only be copies of impressions, and the imagination, though it has a certain freedom in combining what it finds, can invent nothing that it does not find. Thus the idea, represented by a general name and of which an assertion, general in form, is made, must always have a multitude of other qualities besides those common to it with the other individuals to which the name is applicable. If any of these, however, were included in the predicate of the proposition, the sleeping custom, which determines the mind to pass from the idea present to it to the others to which the name has been applied, would be awakened, and it would be seen at once that the predicate is not true of them. When I make a general statement about 'the horse,' there must be present to my mind some particular horse of my acquaintance, but if on the strength of this I asserted that 'the horse is a grey-haired animal,' the custom of applying the name without reference to colour would return upon me and correct me—as it would not if the predicate were 'four-footed.'

He virtually yields the point in regard to the *predicate* of propositions.

220. It would seem then that the predicate may, though the subject cannot, represent either a single quality, or a set of qualities which falls far short even of those common to the class, much more of those which characterise any individual. If I can think these apart, or have an idea of them, as the predicate of a proposition, why not (it may be asked) as the subject? It may be said, indeed, with truth, that it is a mistake to think of the subject as representing one idea and the predicate another; that the proposition as a whole represents one idea, in the sense of a conception of relation between attributes, and that at bottom this account of it is consistent with Locke's definition of knowledge as a perception of relation between 'ideas,' since with him 'ideas' and

'qualities' are used interchangeably.[1] It is no less true, however, that the relation between attributes, which the proposition states, is a relation between them in an individual subject. It is the nature of the individuality of this subject, then, that is really in question. Must it, as Hume supposed, be 'considered' under other qualities than those to which the predicate relates? When the proposition only concerns the relation between certain qualities of a spherical figure, must the figure still be considered as of a certain colour and material?

As to the subject, he equivocates between singleness of feeling and individuality of conception.

221. The possibility of such a question being raised implies that the step has been already taken, which Hume ignored, from feeling to thought. His doctrine on the matter arises from that mental equivocation, of which the effects on Locke have been already noticed,[2] between the mere singleness of a feeling in time and the individuality of the object of thought as a complex of relations. If the impression is the single feeling which disappears with a turn of the head, and the idea a weaker impression, every idea must indeed be in one sense 'individual,' but in a sense that renders all predication impossible because it empties the idea of all content. Really, according to Hume's doctrine of general names, it is individual in a sense which is the most remote opposite of this, as a multitude of 'different resemblances and relations' in 'simplicity.' It is just such an individual as Locke supposed to be found (so to speak) ready-made in nature, and from which he supposed the mind successively to abstract ideas less and less determinate. Such an object Hume, coming after Berkeley, could not regard in Locke's fashion as a separate material existence outside consciousness. The idea with him is a 'copy' not of a thing but of an 'impression,' but to the impression he transfers all that individualization by qualities which Locke had ascribed to the substance found in nature; and from the impression again transfers it to the idea which 'is but the weaker impression.' Thus the singleness in time of the impression becomes the 'simplicity' of an object 'containing many different resemblances and relations,' and the individuality of the subject of a proposition, instead of being regarded in its true light as a temporary isolation from other relations of those for the time under view—an individuality

[1] See above, paragraph 17.
[2] See above, paragraphs 47, 95, &c.

which is perpetually shifting its limits as thought proceeds—becomes an individuality fixed once for all by what is given in the impression. Because, as is supposed, I can only 'see' a globe as of a certain colour and material, I can only think of it as such. If the 'sight' of it had been rightly interpreted as itself a complex work of thought, successively detaching felt things from the 'flux' of feelings and determining these by relations similarly detached, the difficulty of thinking certain of these—*e.g.* those designated as 'figure'—apart from the rest would have disappeared. It would have been seen that this was merely to separate in reflective analysis what had been gradually put together in the successive synthesis of perception. But such an interpretation of the supposed *datum* of sense would have been to elevate thought from the position which Hume assigned to it, as a 'decaying sense,' to that of being itself the organizer of the world which it knows.[1]

Result is a theory which admits predication, but only as singular.

222. Here, then, as elsewhere, the embarrassment of Hume's doctrine is nothing which a better statement of it could avoid. Nay, so dexterous is his statement, that only upon a close scrutiny does the embarrassment disclose itself. To be faithful at once to his reduction of the impression to simple feeling, and to his account of the idea as a mere copy of the impression, was really impossible. If he had kept his word in regard to the impression, he must have found thought filling the void left by the disappearance, under Berkeley's criticism, of that outward system of things which Locke had commonly taken for granted. He preferred fidelity to his account of the idea, and thus virtually restores the fiction which represents the real world as consisting of so many, materially separate, bundles of qualities—a fiction which even Locke in his better moments was beginning to outgrow—with only the difference that for the separation of 'substances' in space he substitutes a separation of 'impressions' in time. That thought (the 'idea') can but faintly copy feeling (the 'impression') he consistently maintains, but he avails himself of the actual determination of feeling by reference to an object of thought—the determination expressed by such phrases as impression of a man, impression of a globe, &c.—to charge the feeling with a content which it only derives from

[1] The phrase 'decaying sense' belongs to Hobbes, but its meaning is adopted by Hume.

such determination, while yet he denies it. By this means predication can be accounted for, as it could not be if our consciousness consisted of mere feelings and their copies, but only in the form of the singular proposition; because the object of thought determined by relations, being identified with a single feeling, must be limited by the 'this' or 'that' which expresses this singleness of feeling. It is really *this* or *that* globe, *this* or *that* man, that is the subject of the proposition, according to Hume, even when in form it is general. It is true that the general name 'globe' or 'man' not merely represents a 'particular' globe or man, though that is all that is presented to the mind, but also 'raises up a custom which produces any other individual idea for which we may have occasion.' As this custom, however, is neither itself an idea nor affects the singleness of the subject idea, it does not constitute any distinction between singular and general propositions, but only between two sorts of the singular proposition according as it does, or does not, suggest an indefinite series of other singular propositions, in which the same qualities are affirmed of different individual ideas to which the subject-name has been applied.

All propositions restricted in same way as Locke's propositions about real existence.

223. A customary sequence, then, of individual ideas upon each other is the reality, which through the delusion of words (as we must suppose) has given rise to the fiction of there being such a thing as general knowledge. We say 'fiction,' for with the possibility of general propositions, as the Greek philosophers once for all pointed out, stands or falls the possibility of science. Locke was so far aware of this that, upon the same principle which led him to deny the possibility of general propositions concerning real existence, he 'suspected' a science of nature to be impossible, and only found an exemption for moral and mathematical truth from this condemnation in its 'bare ideality.' Hume does away with the exemption. He applies to all propositions alike the same limitation which Locke applies to those concerning real existence. With Locke there may very well be a proposition which to the mind, as well as in form, is general—one of which the subject is an 'abstract general idea'—but such proposition 'concerns not existence.' As knowledge of real existence is limited to the 'actual present sensation,' so a proposition about such existence is limited to what is given in such sensation. It is a real truth that this piece of gold

is now being dissolved in aqua regia, when the 'particular experiment' is going on under our eyes, but the general proposition 'gold is soluble' is only an analysis of a nominal essence. With Hume the distinction between propositions that do, and those that do not, 'concern existence' disappears. Every proposition is on the same footing in this respect, since it must needs be a statement about an 'idea,' and every idea exists. 'Every object that is presented must necessarily be existent. . . . Whatever we conceive, we conceive to be existent. Any idea we please to form is the idea of a being; and the idea of a being is any idea we please to form' (p. 370). But since, according to him, the idea cannot be separated, as Locke supposed it could, from the conditions 'that determine it to this or that particular existence,' propositions of the sort which Locke understood by 'general propositions concerning substances,' though if they were possible they would 'concern existence' as much as any, are simply impossible. Hume, in short, though he identifies the real and nominal essences which Locke had distinguished, yet limits the nominal essence by the same 'particularity in space and time' by which Locke had limited the real.

224. A great advance in simplification has been made when the false sort of 'conceptualism' has thus been got rid of—that conceptualism which opposes knowing and being under the notion that things, though merely individual in reality, may be known as general. This riddance having been achieved, as it was by Hume, the import of the proposition becomes the central question of philosophy, the answer to which must determine our theory of real existence just as much as of the mind. The issue may be taken on the proposition in its singular no less than in its general form. The weakness of Hume's opponents, indeed, has lain primarily in their allowing that his doctrine would account for any significant predication whatever, as distinct from exclamations prompted by feelings as they occur. This has been the inch, which once yielded, the full ell of his nominalism has been easily won; just as Locke's empiricism becomes invincible as soon as it is admitted that qualified things are 'found in nature' without any constitutive action of the mind. As the only effective way of dealing with Locke is to ask,—After abstraction of all that he himself admitted to be the creation of thought, what remains to be merely

The question, how the *singular* proposition is possible, the vital one.

found?—so Hume must be met *in limine* by the question whether, apart from such ideas of relation as according to his own showing are not simple impressions, so much as the singular proposition is possible. If not, then the singularity of such proposition does not consist in any singleness of presentation to sense; it is not the 'particularity in time' of a present feeling; and the exclusion of generality, whether in thoughts or in things, as following from the supposed necessity of such singleness or particularity, is quite groundless.

Not relations of resemblance only, but those of quantity also, treated by Hume as feelings.

225. Hitherto the idea of relation which we have had specially in view has been that of relation in the way of resemblance, and the propositions have been such as represent the most obvious 'facts of observation'—facts about this or that 'body,' man or horse or ball. We have seen that these already suppose the thought of an object qualified, not transitory as are feelings, but one to which feelings are referred on their occurrence as resemblances or differences between it and other objects; but that by an equivocation, which unexamined phraseology covers, between the thought of such an object and feeling proper—as if because we talk of seeing a man, therefore a man were a feeling of colour—Hume is able to represent them as mere data of sense, and thus to ignore the difference between related feelings and ideas of relation. Thus the first step has been taken towards transferring to the sensitive subject, as merely sensitive, the power of thought and significant speech. The next is to transfer to it ideas of those other relations[1] which Hume classifies as 'relations of time and place, proportion in quantity or number, degrees in any quality' (p. 368). This done, it is sufficiently equipped for achieving its deliverance from metaphysics. An animal, capable of experiments

[1] The course which our examination of Hume should take was marked out, it will be remembered, by his enumeration of the '*natural*' relations that regulate the association of ideas. It might seem a departure from this course to proceed, as in the text, from the relation of resemblance to 'relations of time and place, proportion in quantity or number, and degrees of any quality,' since these appear in Hume's enumeration, not of '*natural*,' but of '*philosophical*' relations. Such departure, however, is the consequence of Hume's own procedure. Whether he considered these relations merely equivalent to the 'natural ones' of resemblance and contiguity, he does not expressly say; but his reduction of the principles of mathematics to data of sense implies that he did so. The treatment of degrees in quality and proportions in quantity as sensible implies that the difference between resemblance and measured resemblance, between contiguity and measured contiguity, is ignored.

concerning matter of fact, and of reasoning concerning quantity and number, would certainly have some excuse for throwing into the fire all books which sought to make it ashamed of its animality.[1]

226. In thus leaving mathematics and a limited sort of experimental physics (limited by the exclusion of all general inference from the experiment) out of the reach of his scepticism, and in making them his basis of attack upon what he conceived to be the more pretentious claims of knowledge, Hume was again following the course marked out for him by Locke. It will be remembered that Locke, even when his 'suspicion' of knowledge is at its strongest, still finds solid ground (*a*) in 'particular experiments' upon nature, expressed in singular propositions as opposed to assertions of universal or necessary connexion, and (*b*) in mathematical truths which are at once general, certain, and instructive, because 'barely ideal.' All speculative propositions that do not fall under one or other of these heads are either 'trifling' or merely 'probable.' Hume draws the line between certainty and probability at the same point, nor in regard to the ground of certainty as to 'matter of fact or existence' is there any essential difference between him and his master. As this ground is the 'actual present sensation' with the one, so it is the 'impression' with the other; and it is only when the proposition becomes universal or asserts a necessary connection, that the certainty, thus given, is by either supposed to fail. It is true that with Locke this authority of the sensation is a derived authority, depending on its reference to a 'body now operating upon us,' while with Hume, so far as he is faithful to his profession of discarding such reference, it is original. But with each alike the fundamental notion is that a feeling must be 'true *while it lasts*,' and that in regard to real existence or matter of fact no other truth can be known but this. Neither perceives that a truth thus restricted is no truth at all—nothing that can be stated even in a singular proposition; that the 'particularity in time,' on which is supposed to depend the real

He draws the line between certainty and probability at the same point as Locke;

[1] 'If we take in our hand any volume of divinity or school-metaphysics, for instance, let us ask, *Does it contain any abstract reasoning for quantity or number?* No. *Does it contain any experimental reasoning concerning matter of fact and resistance?* *No.* Commit it then to the flames, for it can contain nothing but sophistry and illusion.'—'Inquiry concerning the Human Understanding,' at the end.

certainty of the simple feeling, is just that which deprives it of significance [1]—because neither is really faithful to the restriction. Each allows himself to substitute for the momentary feeling an object qualified by relations, which are the exact opposite of momentary feelings. 'If I myself see a man walk on the ice,' says Locke (IV, xv. 5), 'it is past probability, it is knowledge:' nor would Hume, though ready enough on occasion to point out that what is seen must be a colour, have any scruple in assuming that such a complex judgment as the above so-called 'sight' has the certainty of a simple impression. It is only in bringing to bear upon the characteristic admission of Locke's Fourth Book, that no general knowledge of nature can be more than probable, a more definite notion of what probability is, and in exhibiting the latent inconsistency of this admission with Locke's own doctrine of ideas as effects of a causative substance, that he modifies the theory of *physical* certainty which he inherited. In their treatment of mathematical truths on the other hand, of propositions involving relations of distance, quantity and degree, a fundamental discrepancy appears between the two writers. The ground of certainty, which Hume admits in regard to propositions of this order, must be examined before we can appreciate his theory of probability as it affects the relations of cause and substance.

but is more definite as to probability,

227. It has been shown [2] that Locke's opposition of mathematical to physical certainty, with his ascription to the former of instructive generality on the ground of its bare ideality—the 'ideal' in this regard being opposed to what is found in sensation—strikes at the very root of his system. It implies that thought can originate, and that what it originates is in some sort real—nay, as being nothing else than the 'primary qualities of matter,' is the source of all other reality. Here was an alien element which 'empiricism' could not assimilate without changing its character. Carrying such a conception along with it, it was already charged with an influence which must ultimately work its complete transmutation by compelling, not the admission of an ideal world of guess and aspiration alongside of the empirical, but the recognition of the empirical as itself ideal. The time for

and does not admit opposition of mathematical to physical certainty —here following Berkeley.

[1] See above, paragraphs 45 and 97. [2] See above, paragraphs 117 and 125.

this transmutation, however, was not yet. Berkeley, in over-hasty zeal for God, had missed that only true way of finding God in the world which lies in the discovery that the world is Thought. Having taken fright at the 'mathematical Atheism,' which seemed to grow out of the current doctrines about primary qualities of matter, instead of applying Locke's own admissions to show that these were intelligible and merely intelligible, he fancied that he had won the battle for Theism by making out that they were merely feelings or sequences of feelings. From him Hume got the text for all he had to say against the metaphysical mathematicians; but, for the reason that Hume applied it with no theological interest, its true import becomes more apparent with him than with Berkeley.

His criticisms of the doctrine of primary qualities.

228. His account of mathematical truths, as contained in Part II. of the First Book of the 'Treatise on Human Nature,' cannot be fairly read except in connection with the chapters in Part IV. on 'Scepticism with regard to the Senses,' and on 'the Modern Philosophy.' The latter chapter is expressly a polemic against Locke's doctrine of primary qualities, and its drift is to reverse the relations which Locke had asserted between them and sensations, making the primary qualities depend on sensations, instead of sensations on the primary qualities. In Locke himself we have found that two inconsistent views on the subject perpetually cross each other.[1] According to one, momentary sensation is the sole conveyance to us of reality; according to the other, the real is constituted by qualities of bodies which not only 'are in them whether we perceive them or not,' but which only complex ideas of relation can represent. The unconscious device which covered this inconsistency lay, we found,[2] in the conversion of the mere feeling of touch into the touch *of a body*, and thus into an experience of solidity. By this conversion, since solidity according to Locke's account carries with it all the primary qualities, these too become data of sensation, while yet, by the retention of the opposition between them and ideas, the advantage is gained of apparently avoiding that identification of what is real with simple feeling, which science and common sense alike repel.

229. Hume makes a show of getting rid of this see-saw. It will not

[1] See above, paragraph 99 and following.

[2] See above, paragraph 101.

do to oppose bodies to our feeling, when only feeling can give idea of body.

Instead of assuming at once the reality of sensation on the strength of its relation to the primary qualities and the reality of these on the strength of their being given in tactual experience, he pronounces sensations alone the real, to which the primary qualities must be reduced, if they are not to disappear altogether. 'If colours, sounds, tastes, and smells be merely perceptions, nothing we can conceive is possessed of a real, continued, and independent existence' (513). That they are perceptions is of course undoubted. The question is, whether there is a real something beside and beyond them, contrast with which is implied in speaking of them as '*merely* perceptions.' The supposed qualities of such a real are 'motion, extension, and solidity' (Ibid.). To modes of these the other primary qualities enumerated by Locke are reducible; and of these again motion and extension, according to Locke's account no less than Hume's own, presuppose solidity. What then do we assert of the real, in contrast with which we talk of perception, as *mere* perception, when we say that it is solid? 'In order to form an idea of solidity we must conceive two bodies pressing on each other without any penetration. . . . . Now, what idea do we form of these bodies? . . . . . To say that we conceive them as solid is to run on *ad infinitum*. To affirm that we paint them out to ourselves as extended, either resolves them all into a false idea or returns in a circle; extension must necessarily be conceived either as coloured, which is a false idea,[1] or as solid, which brings us back to the first question.' Of solidity, then, the ultimate determination of the supposed real, there is 'no idea to be formed' apart from those perceptions to which, as independent of our senses, it is opposed. 'After exclusion of colours, sounds, heat and cold from the rank of external existences, there remains nothing which can afford us a just and consistent idea of body.'

Locke's shuffle of 'body,' 'solidity,' and 'touch,' fairly exposed.

230. Our examination of Locke has shown us how it is that his interpretation of ideas by reference to body is fairly open to this attack. It is so because, in thus interpreting them, he did not know what he was really about. He thought he was explaining ideas of sense according to the only method of explanation which he recognises—the method of resolving

[1] 'A false idea,' that is, according to the doctrine that extension is a primary quality, while colour is only an idea of a secondary quality, not resembling the quality as it is in the thing.

complex into simple ideas, and of 'sending a man to his senses' for a knowledge of the simple. In fact, however, when he explained ideas of sense as derived from the qualities of body, he was explaining simple ideas by reference to that which, according to his own showing, is a complex idea. To say that, as Locke understood the derivation in question, the primary qualities are an *ἄιτιον γενεσέως* to the ideas of secondary qualities, but not an *ἄιτιον γνωσέως*—that without our having ideas of them they cause those ideas of sense from which afterwards our ideas of the primary qualities are formed—is to suppose an order of reality other than the order of our sensitive experience, and thus to contradict Locke's fundamental doctrine that the genesis of ideas is to be found by observing their succession in 'our own breasts.' It is not thus that Locke himself escapes the difficulty. As we have seen, he supposes our ideas of sense to be from the beginning ideas of the qualities of bodies, and virtually justifies the supposition by sending the reader to his sense of touch for that idea of solidity in which, as he defines it, all the primary qualities are involved. That the sense in question does not really yield the idea is what Hume points out when he says that, 'though bodies are felt by means of their solidity, yet the feeling is quite a different thing from the solidity, nor have they the least resemblance to each other.' In other words, having come to suppose that there are solid bodies, we explain our feeling as due to their solidity; but we may not at once interpret feeling as the result of solidity, and treat solidity as itself a feeling. It was by allowing himself so to treat it that Locke disguised from himself the objection to his interpretation of feeling. Hume tears off the disguise, and in effect gives him the choice of being convicted either of reasoning in a circle or of explaining the simple idea by reference to the complex. The solidity, which is to explain feeling, can itself only be explained by reference to body. If body is only a complex of ideas of sense, in referring tactual feeling to it we are explaining a simple idea by reference to a compound one. If it is not, how is it to be defined except in the 'circular' way, which Locke in fact adopts when he makes body a 'texture of solid parts' and solidity a relation of bodies?[1]

[1] See above, paragraph 101.

True rationale of Locke's doctrine.

231. This 'vicious circle' was nothing of which Locke need have been ashamed, if only he had understood and avowed its necessity. Body is to solidity and to the primary qualities in general simply as a substance to the relations that determine it; and the 'circle' in question merely represents the logical impossibility of defining a substance except by relations, and of defining these relations without presupposing a substance. It was only Locke's confusion of the order of logical correlation with the sequence of feelings in time, that laid him open to the charge of making body and the ideas of primary qualities, and again the latter ideas and those of secondary qualities, at once precede and follow each other. To avoid this confusion by recognising the logical order—the order of intellectual 'fictions'—as that apart from which the sequence of feelings would be no order of knowable reality at all, would be of course impossible for one who took Locke's antithesis of thought and fact for granted. The time for that was not yet. A way of escape had first to be sought in a more strict adherence to Locke's identification of the sequence of feelings with the order of reality. Hence Hume's attempt, reversing Locke's derivation of ideas of sense from primary qualities of body, to derive what with Locke had been primary qualities, as compound impressions of sense, from simple impressions and to reduce body itself to a name not for any 'just and consistent idea,' but for a 'propensity to feign,' the gradual product of custom and imagination. The question by which the value of such derivation and reduction is to be tried is our old one, whether it is not a tacit conversion of the supposed original impressions into qualities of body that alone makes them seem to yield the result required of them. If the Fourth Book of the 'Treatise on Human Nature,' with its elimination of the idea of body, had come before the second, would not the plausibility of the account of mathematical ideas contained in the latter have disappeared? And conversely, if these ideas had been reduced to that which upon elimination of the idea of body they properly become, would not that 'propensity to feign,' which is to take the place of the excluded idea, be itself unaccountable?

With Hume 'body' logically disappears

232. 'After exclusion of colours, sounds, heat and cold, from the rank of external existences, there remains nothing which can afford us a just and consistent idea of body.'

Now, no one can 'exclude them from the rank of external existences' more decisively than Hume. They are impressions, and 'all impressions are internal and perishing existences, and appear as such.' Nor does he shirk the consequence, that we have no 'just and consistent idea of body.' It is true that we cannot avoid a 'belief in its existence'—a belief which according to Hume consists in the supposition of 'a continued existence of objects when they no longer appear to the senses, and of their existence as distinct from the mind and perceptions;' in other words, as 'external to and independent of us.' This belief, however, as he shows, is not given by the senses. That we should feel the existence of an object to be continued when we no longer feel it, is a contradiction in terms; nor is it less so, that we should feel it to be distinct from the feeling. We cannot, then, have an impression of body; and, since we cannot have an idea which does not correspond to an impression or collection of impressions, it follows that we can have no idea of it. How the 'belief in its existence' is accounted for by Hume in the absence of any idea of it, is a question to be considered later.[1] Our present concern is to know whether the idea of extension can hold its ground when the idea of body is excluded.

What then?

233. 'The first notion of space and extension,' he says, 'is derived solely from the senses of sight and feeling: nor is there anything but what is coloured or tangible that has parts disposed after such a manner as to convey the idea.' Now, there may be a meaning of 'derivation,' according to which no one would care to dispute the first clause of this sentence. Those who hold that *really*, i.e. *for a consciousness to which the distinction between real and unreal is possible*, there is no feeling except such as is determined by thought, are yet far from holding that the determination is arbitrary; that any and every feeling is potentially any and every conception. Of the feelings to which the visual and tactual nerves are organic, as they would be for a merely feeling consciousness, nothing, they hold, can be said; in that sense they are an ἄπειρον; but for the thinking consciousness, or (which is the same) as they *really* are, these feelings do, while those to which other nerves are organic do not, form the specific possibility of the conception of space. Ac-

Can Space survive Body? Hume derives idea of it from sight and feeling.

[1] See below, paragraph 303, and foll.

cording to this meaning of the words, all must admit that 'the first notion of space and extension is derived from the senses of sight and feeling;' though it does not follow that a repeated or continued activity of either sense is necessary to the continued presence of the notion. With Hume, however, the derivation spoken of must mean that the notion of space is, to begin with, simply a visual or tactual feeling, and that such it remains, though with indefinite abatement and revival in the liveliness of the feeling, according to the amount of which it is called 'impression' or 'idea.' If we supposed him to mean, not that the notion of space was either a visual or tactual feeling indifferently, but that it was a compound result of both,[1] we should merely have to meet a further difficulty as to the possibility of such composition of feelings when their inward synthesis in a soul, and the outward in a body, have been alike excluded. In the next clause of the sentence, however, we find that for visual and tactual feelings there are quietly substituted 'coloured and tangible objects, having parts so disposed as to convey the idea of extension.' It is in the light of this latter clause that the uncritical reader interprets the former. He reads back the plausibility of the one into the other, and, having done so, finds the whole plausible. Now this plausibility of the latter clause arises from its implying a three-fold distinction—a distinction of colour or tangibility on the one side from the disposition of the parts on the other; a distinction of the colour, tangibility and disposition of parts alike from an object to which they belong; and a distinction of this object from the idea that it conveys. In other words, it supposes a negative answer to the three following questions:—Is the idea of extension the same as that of colour or tangibility? Is it possible without reference to something other than a possible impression? Is the idea of extension itself extended? Yet to the two latter questions, according to Hume's express statements, the answer must be affirmative; nor can he avoid the affirmative answer to the first, to which he would properly be brought, except by equivocation.

Significance with him of such derivation.

It means, in effect, that colour and space are the same,

234. The *pièces justificatives* for this assertion are not far to seek. Some of them have been adduced already. The idea of space, like every other idea, must be a 'copy of an

[1] It is not really in this sense that the impression of space according to Hume is a 'compound' one, as will appear below.

impression.'[1] To speak of a feeling in its fainter stage as an 'image' of what it was in its livelier stage may, indeed, seem a curious use of terms; but in this sense only, according to Hume's strict doctrine, can the idea of space be spoken of as an 'image' of anything at all. The impression from which it is derived, *i.e.* the feeling at its liveliest, cannot properly be so spoken of, for 'no impression is presented by the senses as the image of anything distinct, or external, or independent.'[2] If no impression is so presented, neither can any idea, which copies the impression, be so. It can involve no reference to anything which does not come and go with the impression. Accordingly no distinction is possible between space on the one hand, and either the impression or idea of it on the other. All impressions and ideas that can be said to be of extension must be themselves extended; and conversely, as Hume puts it, 'all the qualities of extension are qualities of a perception.' It should follow that space is either a colour or feeling of touch. In the terms which Hume himself uses with reference to 'substance,' 'if it be perceived by the eyes, it must be colour; if by the ears, a sound; and so on, of the other senses.' As he expressly tells us that it is 'perceived by the eyes,' the conclusion is inevitable.

and that feeling may be extended.

235. Hume does not attempt to reject the conclusion directly. He had too much eye to the appearance of consistency for that. But, in professing to admit it, he wholly alters its significance. The passage in question must be quoted at length. 'The table, which just now appears to me, is only a perception, and all its qualities are qualities of a perception. Now, the most obvious of all its qualities is extension. The perception consists of parts. These parts are so situated as to afford us the notion of distance and contiguity, of length, breadth, and thickness. The termination of these three dimensions is what we call figure. The figure is moveable, separable, and divisible. Mobility and separability are the distinguishing properties of extended objects. And, to cut short all disputes, the very idea of extension is copied from nothing but an impression, and consequently must perfectly agree to it. To say the idea of extension agrees to anything is to say it is extended.' Thus 'there are impressions and ideas that are really extended.'[3]

The parts of space are parts of a perception.

[1] P. 340. [2] P. 479. [3] P. 523.

236. In order to a proper appreciation of this passage it is essential to bear in mind that Hume, so far as the usages of language would allow him, ignores all such differences in modes of consciousness as the Germans indicate by the distinction between 'Empfindung' and 'Vorstellung,' and by that between 'Anschauung' and 'Begriff;' or, more properly, that he expressly merges them in a mode of consciousness for which, according to the most consistent account that can be gathered from him, the most natural term would be 'feeling.'[1] It is true that Hume himself, admitting a distinction in the degree of vivacity with which this consciousness is at different times presented, inclines to restrict the term 'feeling' to its more vivacious stage, and to use 'perception' as the more general term, applicable whatever the degree of vivacity may be.[2] We must not allow him, however, in using this term to gain the advantage of a meaning which popular theory does, but his does not, attach to it. 'Perception' with him covers 'idea' as well as 'impression;' but nothing can be said of idea that cannot be said of impression, save that it is less lively, nor of impression that cannot be said of idea, save that it is more so. It is this explicit reduction of all consciousness virtually, if not in name, to feeling that brings to the surface the difficulties latent in Locke's 'idealism.' These we have already traced at large; but they may be summed up in the question, How can feelings, as 'particular in time' or (which is the same) in 'perpetual flux,' constitute or represent a world of permanent relations?[3] The difficulty becomes more obvious, though not more real, when the relations in question are not merely themselves permanent, like those between natural phenomena, but are 'relations between permanent parts,' like those of space. It is for this reason that its doctrine about geometry has always been found the most easily assailable point of the 'sensational' philosophy. Locke distinguishes the ideas of space and of duration as got, the one 'from the permanent parts of space,' the other 'from the fleeting and perpetually perishing parts of succession.'[4] He afterwards prefers the term 'expan-

Yet the parts of space are co-existent not successive.

[1] As implying no distinction from, or reference to, a thing causing and a subject experiencing it. See above, paragraphs 195 and 208, and the passages there referred to.

[2] 'To hate, to love, to think, to feel, to see; all this is nothing but to perceive.' P. 371.

'When I shut my eyes and *think* of my chamber, the ideas I form are exact representations of the impressions I *felt*.' P. 312.

[3] See above, paragraphs 172 & 176.

[4] Essay II. chap. xiv. sec. 1.

sion' to space, as the opposite of duration, because it brings out more clearly the distinction of a relation between permanent parts from that between 'fleeting successive parts which never exist together.' How, then, can a consciousness consisting simply of 'fleeting successive parts' either be or represent that of which the differentia is that its parts are permanent and co-exist?

237. If this crux had been fairly faced by Hume, he must have seen that the only way in which he could consistently deal with it was by radically altering, with whatever consequence to the sciences, Locke's account of space. As it was, he did not face it, but—whether intentionally or only in effect —disguised it by availing himself of the received usages of language, which roughly represent a theory the exact opposite of his own, to cover the incompatibility between the established view of the nature of space, and his own reduction of it to feeling. A very little examination of the passage, quoted at large above, will show that while in it a profession is made of identifying extension and a certain sort of perception with each other, its effect is not really to reduce extension to such a perception as Hume elsewhere explains all perceptions to be, but to transfer the recognised properties of extension which with such reduction would disappear, to something which for the time he chooses to reckon a perception, but which he can only so reckon at the cost of contradicting his whole method of dealing with the ideas of God, the soul, and the world. The passage, in fact, is merely one sample of the continued shuffle by which Hume on the one hand ascribes to feeling that intelligible content which it only derives from relation to objects of thought, and on the other disposes of these objects because they are not feelings.

Hume cannot make space a 'perception' without being false to his own account of perception;

238. 'The table, which just now appears to me, is only a perception, and all its qualities are qualities of a perception. Now, the most obvious of all its qualities is extension. The perception consists of parts. These parts are so situated as to afford us the notion of distance and contiguity, of length, breadth, and thickness,' &c., &c. If, now, throughout this statement (as according to Hume's doctrine we are entitled to do) we write *feeling* for 'perception' and 'notion,' it will appear that this table is a feeling, which has another feeling, called extension, as one of its qualities; and that this latter feeling consists of parts. These, in turn, must be emselves

as appears if we put 'feeling' for 'perception' in the passages in question.

feelings, since the parts of which a perception consists must be themselves perceived, and, being perceived, must, according to Hume, be themselves perceptions which = feelings. These feelings, again, afford us other feelings of certain relations —distance and contiguity, &c.—feelings which, as Hume's doctrine allows of no distinction between the feeling and that of which it is the feeling, must be themselves relations. Thus it would seem that a feeling may have another feeling as one of its qualities; that the feeling, which is thus a quality, has other feelings as its co-existent parts; and that the feelings which are parts 'afford us' other feelings which are relations. Is that sense or nonsense?

To make sense of them, we must take perception to mean perceived thing,

239. To this a follower of Hume, if he could be brought to admit the legitimacy of depriving his master of the benefit of synonyms, might probably reply, that the apparent nonsense only arises from our being unaccustomed to such use of the term 'feeling;' that the table is a 'bundle of feelings,' actual and possible, of which the actual one of sight suggests a lively expectation, easily confused with the presence, of the others belonging to the other senses; that any one of these may be considered a quality of the total impression formed by all; that the feeling thus considered, if it happens to be visual, may not improperly be said to consist of other feelings, as a whole consists of parts, since it is the result of impressions on different parts of the retina, and from a different point of view even itself to be the relation between the parts, just as naturally as a mutual feeling of friendship may be said either to consist of the loves of the two parties to the friendship, or to constitute the relation between them. Such language represents those modern adaptations of Hume, which retain his identification of the real with the felt but ignore his restrictions on the felt. Undoubtedly, if Hume allowed us to drop the distinction between feeling as it might be for a merely feeling consciousness, and feeling as it is for a thinking consciousness, the objection to his speaking of feeling in those terms, in which it must be spoken of if extension is to be a feeling, would disappear; but so, likewise, would the objection to speaking of thought as constitutive of reality. To appreciate his view we must take feeling not as we really know it—for we cannot know it except under those conditions of self-consciousness, the logical categories, which in his attempt to get at feeling, pure and simple, Hume is consistent

enough to exclude—but as it becomes upon exclusion of all determination by objects which Hume reckons fictitious. What it would thus become *positively* we of course cannot say, for of the unknowable nothing can be said; but we can decide *negatively* what it cannot be. Can that in any case be said of it, which must be said of it if a feeling may be extended, and if extension is a feeling? Can it be such a quality of an object, so consisting of parts, and such a relation, as we have found that Hume takes it to be in his account of the perception of this table?

which it can only mean as the result of certain 'fictions.'

240. After having taken leave throughout the earlier part of the 'Treatise on Human Nature' to speak in the ordinary way of objects and their qualities—and otherwise of course he could not have spoken at all—in the fourth book he seems for the first time to become aware that his doctrine did not authorise such language. To perceive qualities of an object is to be conscious of relation between a subject and object, of which neither perishes with the moment of perception. Such consciousness is self-consciousness, and cannot be reduced to any natural observable event, since it is consciousness of that of which we cannot say 'Lo, here,' or 'Lo, there,' 'it is now but was not then,' or 'it was then but is not now.' It is therefore something which the spirit of the Lockeian philosophy cannot assimilate, and which Hume, as the most consistent exponent of that spirit, most consistently tried to get rid of. The subject as self, the object as body, he professes to reduce to figures of speech, to be accounted for as the result of certain 'propensities to feign:' nor will he allow that any impression or idea (and impressions and ideas with him, be it remembered, exhaust our consciousness) carries with it a reference to an object other than itself, any more than do pleasure or pain to which 'in their nature' all perceptions correspond.[1] He cannot, indeed, avoid speaking of the consciousness thus reduced to the level of simple pain and pleasure, as being that which in fact it can only be when determined by relation to a self-conscious subject, *i.e.* as

[1] 'Every impression, external and internal, passions, affections, sensations, pains, and pleasures, are originally on the same footing; and, whatever other differences we may observe among them, appear, all of them, in their true colours, as impressions or perceptions.' P. 480. 'All sensations are felt by the mind such as they really are; and, when we doubt whether they present themselves as distinct objects or as mere impressions, the difficulty is not concerning their nature, but concerning their relations and situation.' P. 480.

itself an object; but he is so far faithful in his attempt to avoid such determination, that he does not reckon the object more permanent than the impression. It, too, is a 'perishing existence.' As the impression disappears with a 'turn of the eye in its socket,' so does the object, which really is the impression, and cannot appear other than it is any more than a feeling can be felt to be what it is not.[1]

If felt, thing is no more than feeling, how can it have qualities?

241. Such being the only possible object, how can qualities of it be perceived? We cannot here find refuge in any such propensity to feign as that which, according to Hume, leads us to 'endow objects with a continued existence, distinct from our perceptions.' If such propensities can give rise to impressions at all, it can only be to impressions of reflection, and it cannot be in virtue of them that extension, an impression of sensation, is given as a quality of an object. Now if there is any meaning in the phrase 'qualities of an object,' it implies that the qualities co-exist with each other and the object. Feelings, then, which are felt as qualities of another feeling must co-exist with, *i.e.* (according to Hume) be felt at the same time as, it and each other. Thus, if an impression of sight be the supposed object, no feeling that occurs after this impression has disappeared can be a quality of it. Accordingly, when Hume speaks of extension being seen as one of the qualities of this table, he is only entitled to mean that it is one among several feelings, experienced at one and the same time, which together constitute the table. Whatever is not so experienced, whether extension or anything else, can be no quality of that 'perception.' How much of the perception, then, will survive? Can any feelings, strictly speaking, be cotemporaneous? Those received through different senses, as Hume is careful to show, may be; *e.g.* the smell, taste, and colour of a fruit.[2] In regard to them, therefore, we may waive the difficulty, How can feelings successive to each other be yet co-existent qualities? but only to find ourselves in another as to what the object may be of which the cotemporaneous feelings are qualities. It cannot, according to Hume, be

[1] See above, paragraph 208, with the passages there cited.

[2] 'The taste and smell of any fruit are inseparable from its other qualities of colour and tangibility, and . . . . 'tis certain they are always co-existent. Nor are they only co-existent in general, but also cotemporary in their appearance in the mind.' P. 521. (Contrast p. 370, where existence and appearance are identified.)

other than one or all of the cotemporaneous feelings. Is, then, the taste of an apple a quality of its colour or of its smell, or of colour, smell, and taste put together? It will not help us to speak of the several feelings as qualities of the 'total impression;' for the 'total impression' either merely means the several feelings put together, or else covertly implies just that reference to an object other than these, which Hume expressly excludes.

The thing will have ceased before the quality begins to be.

242. In fact, however, when he speaks of the feeling, which is called extension, as a quality of the feeling, which is called sight, of the table, he has not even the excuse that he might have had if the feelings in question, being of different senses, might be cotemporary. According to him they are feelings of the same sense. The extension of the table he took to be a datum of sight just as properly as its colour; yet he cannot call it the same as colour, but only 'a quality of the coloured object.' As the 'coloured object,' however, apart from 'propensities to feign,' can, according to him, be no other than the feeling of colour, his doctrine can only mean that, colour and extension being feelings of the same sense, the latter is a quality of the former. Is this any more possible than that red should be a quality of blue, or a sour taste of a bitter one? Must not the two feelings be successive, however closely successive, so that the one which is object will have disappeared before the other, which is to be its quality, will have occurred?[1]

Hume equivocates by putting 'coloured points' for colour.

243. If we look to the detailed account which Hume gives of the relation between extension and colour, we find that he avoids the appearance of making one feeling a quality of another, by in fact substituting for colour a superficies of coloured points, in which it is very easy to find extension as a quality because it already is extension as an object. To speak of extension, though a feeling, as made up of parts is just as legitimate or illegitimate as to speak of the feeling of colour being made up of coloured points. The legitimacy of this once admitted, there remains, indeed, a logical question as to how it is that a quality should be spoken of in terms that seem proper to a substance—as is done when it is said

[1] It should be needless to point out that by taking extension to be a quality of 'tangibility' or muscular effort we merely change the difficulty. The question as to its relation to such feelings will be simply a repetition of that, put in the text, as to its relation to the feeling of colour.

to consist of parts—and yet, again, should be pronounced a relation of these parts; but to one who professed to merge all logical distinctions in the indifference of simple feeling, such a question could have no recognised meaning. It is, then, upon the question whether, according to Hume's doctrine of perception, the perception of an object made up of coloured points may be used interchangeably with the perception of colour, that the consistency of his doctrine of extension must finally be tried.

244. The detailed account is to the following effect:—'Upon opening my eyes and turning them to the surrounding objects, I perceive many visible bodies; and upon shutting them again and considering the distance betwixt these bodies, I acquire the idea of extension.' From what impression, Hume proceeds to ask, is this idea derived? 'Internal impressions' being excluded, 'there remain nothing but the senses which can convey to us this original impression.' . . . 'The table before me is alone sufficient by its view to give me the idea of extension. This idea, then, is borrowed from and represents some impression which this moment appears to the senses. But my senses convey to me only the impressions of coloured points, disposed in a certain manner. . . . We may conclude that the idea of extension is nothing but a copy of these coloured points and of the manner of their appearance.'[1]

Can a 'disposition of coloured points' be an impression?

245. If the first sentence of the above had been found by Hume in an author whom he was criticising, he would scarcely have been slow to pronounce it tautological. As it stands, it simply tells us that having seen things extended we consider their extension, and upon considering it acquire an idea of it. It is a fair sample enough of those 'natural histories' of the soul in vogue among us, which by the help of a varied nomenclature seem able to explain a supposed later state of consciousness as the result of a supposed earlier one, because the terms in which the earlier is described in effect assume the later. It may be said, however, that it is only by a misinterpretation of a carelessly written sentence that Hume can be represented as deriving the idea of extension from the consideration of distance; that, as the sequel shows, he regarded the 'consideration' and the 'idea' in question

[1] Pp. 340 and 341.

as equivalent, and derived from the same impression of sense. It is undoubtedly upon his account of this impression that his doctrine of extension depends. It is described as 'an impression of coloured points disposed in a certain manner.' To it the idea of extension is related simply as a copy; which, we have seen, properly means with Hume, as a feeling in a less lively stage is related to the same feeling in a more lively stage. It is itself, we must note, the *impression* of extension; and it is an impression of sense, about which, accordingly, no further question can properly be raised. Hume, indeed, allows himself to speak as if it were included in a 'perception of visible bodies' other than itself; just as in the passage from the fourth book previously examined, he speaks as if the perception, called extension, were a quality of some other perception. This we must regard as an exercise of the privilege which he claims of 'speaking with the vulgar while he thought with the learned;' since, according to him, 'visible body,' in any other sense than that of the impression of coloured points, is properly a name for a 'propensity to feign' resulting from a process posterior to all impressions of sense. The question remains whether, in speaking of an impression as one of 'coloured points disposed in a certain manner,' he is not introducing a 'fiction of thought' into the impression just as much as in calling it a 'perception of body.'

246. An impression, we know, can, according to Hume, never be *of* an object in the sense of involving a reference to anything other than itself. When one is said, then, to be *of* coloured points, &c., this can only mean that itself *is*, or consists of, such points. Thus the question we have to answer is only a more definite form of the one previously put, Can a feeling consist of parts? In answering it we must remember that the parts, here supposed to be coloured points, must, according to Hume's doctrine, be themselves impressions or they are nothing. Consistently with this he speaks of extension as 'a compound impression, consisting of parts or lesser impressions, that are indivisible to the eye or feeling, and may be called impressions of atoms or corpuscles, endowed with colour and solidity.'[1] Now, unless we suppose that a multitude of feelings of one and the same

The points must be themselves impressions, and therefore not co-existent.

[1] P. 345.

sense can be present together, these 'lesser impressions' must follow each other and precede the 'compound impression.' That is to say, none of the parts of which extension consists will be in existence at the same time, and all will have ceased to exist before extension itself comes into being. Can we, then, adopt the alternative supposition that a multitude of feelings of one and the same sense can be present together? In answering this question according to Hume's premisses we may not help ourselves by saying that in a case of vision there really are impressions on different parts of the retina. To say that it *really* is so, is to say that it is so for the *thinking* consciousness—for a consciousness that distinguishes between what it feels and what it knows. To a man, as simply seeing and while he sees, his sight is not an impression on the retina at all, much less a combination of impressions on different parts of the retina. It is so for him only as thinking on the organs of his sight; or, if we like, as 'seeing' them in another, but 'seeing' them in a way determined by sundry suppositions (bodies, rays, and the like) which are not feelings, and therefore with Hume not possible 'perceptions,' at all. But it is the impression of sight, as it would be for one simply seeing and while he sees, undetermined by reference to anything other than itself, whether subject or object—an impression as it would be for a merely feeling consciousness or (in Hume's language) 'on the same footing with pain and pleasure'—that we have to do with when, from Hume's point of view, we ask whether a multitude of such impressions can be present at once, *i.e.* as one impression.

A 'compound impression' excluded by Hume's doctrine of time.

247. If this question had been brought home to Hume, he could scarcely have avoided the admission that to answer it affirmatively involved just as much of a contradiction as that which he recognises between the 'interrupted' and 'continuous' existence of objects;[1] and just as in the latter case he gets over the contradiction by taking the interrupted existence, because the datum of sense, to be the reality, and the continued existence to be a belief resulting from 'propensities to feign,' so in the case before us he must have taken the multiplicity of successive impressions to be the reality, and their co-existence as related parts to be a

[1] P. 483 and following, and p. 486.

figure of speech, which he must account for as best he could. As it is, he so plays fast and loose with the meaning of 'impression' as to hide the contradiction which is involved in the notion of a 'compound impression' if impression is interpreted as feeling—the contradiction, namely, that a single feeling should be felt to be manifold—and in consequence loses the chance of being brought to that truer interpretation of the compound impression, as the thought of an object under relations, which a more honest trial of its reduction to feeling might have shown to be necessary. To convict so skilful a writer of a contradiction in terms can never be an easy task. He does not in so many words tell us that all impressions of sight must be successive, but he does tell us that 'the impressions of touch,' which, indifferently with those of sight, he holds to constitute the compound impression of extension, 'change every moment upon us.'[1] And in the immediate sequel of the passage where he has made out extension to be a compound of co-existent impressions, he derives the idea of time 'from the succession of our perceptions *of every kind*, ideas as well as impressions, and impressions of reflection as well as of sensation.' The parts of time, he goes on to say, cannot be co-existent; and, since 'time itself is nothing but different ideas and impressions succeeding each other,' these parts, we must conclude, are those 'perceptions of every kind' from which the idea of time is derived.[2] It is only, in fact, by availing himself of the distinction, which he yet expressly rejects, between the impression and its object, that he disguises the contradiction in terms of first pronouncing certain impressions, as parts of space, co-existent, and then pronouncing all impressions, as parts of time, successive. A statement that 'as from the coexistence of visual, and also of tactual, perceptions we receive the idea of extension, so from the succession of perceptions of every kind we form the idea of time,' would arouse the suspicion of the most casual reader; while Hume's version of the same,—'as 'tis from the disposition of visible and tangible objects we receive the idea of space, so from the succession of ideas and impressions we form the idea of time'[3]—has the full ring of empirical plausibility.

[1] P. 516. [2] Pp. 342, 343. [3] P. 342.

The fact that colours mix, not to the purpose.

248. This plausibility depends chiefly on our reading into Hume's doctrine a physical theory which, as implying a distinction between feeling and its real but unfelt cause, is strictly incompatible with it. Is it not an undoubted fact, the reader asks, that two colours may combine to produce a third different from both—that red and yellow, for instance, together produce orange? Is not this already an instance of a compound impression? Why may not a like composition of unextended impressions of colour constitute an impression different from any one of the component impressions, viz. extended colour? A moment's consideration, however, will show that no one has a conscious sensation at once of red and yellow, and of orange as a compound of the two. The elements which combine to produce the colour called orange are not—as they ought to be if it is to be a case of compound impression in Hume's sense—feelings of the person who sees the orange colour, but certain known causes of feeling, confused in language with the feelings, which separately they might produce, but which in fact they do not produce when they combine to give the sensation of orange; and to such causes of feeling, which are not themselves feelings, Hume properly can have nothing to say.

How Hume avoids appearance of identifying space with colour,

249. So far we have been considering the composition of impressions generally, without special reference to extension. The contradiction pointed out arises from the confusion between impressions as felt and impressions as thought of; between feelings as they are in themselves, presented successively in time, and feelings as determined by relation to the thinking subject, which takes them out of the flux of time and converts them into members of a permanent whole. It is in this form that the confusion is most apt to elude us. When the conceived object is one of which the qualities can really be felt, *e.g.* colour, we readily forget that a felt quality is no longer simply a feeling. But the case is different when the object is one, like extension, which forces on us the question whether its qualities can be felt, or presented in feeling, at all. A compound of impressions of colour, to adopt Hume's phraseology, even if such composition were possible, would still be nothing else than an impression of colour. In more accurate language, the conception, which results from the action of thought upon feelings of colour, can only be a conception of colour. Is extension, then, the

same as colour? To say that it was would imply that geometry was a science of colour; and Hume, though ready enough to outrage 'Metaphysics and School Divinity,' always stops reverently short of direct offence to the mathematical sciences. As has been said above, of the three main questions about the idea of extension which his doctrine raises—Is it itself extended? Is it possible without reference to something other than a possible impression? Is it the same as the idea of colour or tangibility?—the last is the only one which he can scarcely even profess to answer in the affirmative.[1] Even when he has gone so far as to speak of the parts of a perception, a sound instinct compels him, instead of identifying the perception directly with extension, to speak of it as 'affording through the situation of its parts the notion of' extension.[2] In like manner, when he has asserted extension to be a compound of impressions, he avoids the proper consequence of the assertion by speaking of the component impressions as those, not of colour but, of coloured points, 'atoms or corpuscles endowed with colour and solidity;' and, again, does not call extension the compound of these simply, but the compound of them as 'disposed in a certain manner.' When the idea which is a copy of this impression has to be spoken of, the expression is varied again. It is an 'idea of the coloured points *and of the manner of their appearance*,' or of their 'disposition.' The disposition of the parts having been thus virtually distinguished from their colour, it is easy to suppose that, finding a likeness in the disposition of points under every unlikeness of their colour, 'we omit the peculiarities of colour, as far as possible, and found an abstract idea merely on that disposition of points, or manner of appearance, in which they agree. Nay, even when the resemblance is carried beyond the objects of one sense, and the impressions of touch are found to be similar to those of sight in the disposition of their parts, this does not hinder the abstract idea from representing both on account of their resemblance.'[3]

and accounts for the abstraction of space.

250. If words have any meaning, the above must imply that the disposition of points is at least a different idea from either colour or tangibility, however impossible it may be for

In so doing, he implies that space is a relation,

[1] Above, paragraph 233. Though, as we shall see, he does so in one passage.

[2] Above, paragraph 235.

[3] P. 341.

us to experience it without one or other of the latter. Nor can we suppose that this impression, other than colour, is one that first results from the composition of colours, even if we admit that such composition could yield a result different from colour. According to Hume, the components of the compound impression are already impressions of coloured 'points, atoms, or corpuscles,' and such points imply just that limitation by mutual externality, which is already the disposition in question. Is this 'disposition,' then, an impression of sensation? If so, 'through which of the senses is it received? If it be perceived by the eyes it must be a colour,' &c. &c.;[1] but from colour, the impression with which Hume would have identified it if he could, he yet finds himself obliged virtually to distinguish it. It is a relation, and not even one of those relations, such as resemblance, which in Hume's language, 'depending on the nature of the impressions related,'[2] may plausibly be reckoned to be themselves impressions. The 'disposition' of parts and their 'situation' he uses interchangeably, and the situation of impressions he expressly opposes to their 'nature'[3]—that nature in respect of which all impressions, call them what we like, are 'originally on the same footing' with pain and pleasure. Consistently with this he pronounces the 'external position' of objects—their position as bodies external to each other and to our body—to be no datum of sense, no impression or idea, at all.[4] Our belief in it has to be accounted for as a complex result of 'propensities to feign.' How, then, can there be an impression of that which does not belong to the nature of any impression? What difference is there between 'bodies' and 'corpuscles endowed with colour and solidity,' that the outwardness of the latter to each other—also called their

and a relation which is not a possible impression.

[1] Above, paragraph 208.

[2] P. 372, 'Philosophical relations may be divided into two classes: into such as depend entirely on the ideas which we compare together; and such as may be changed without any change in the ideas. . . . The relations of contiguity and distance between two objects may be changed without any change in the objects themselves or their ideas.'

[3] P. 480. 'When we doubt whether sensations present themselves as distinct objects or as mere impressions, the difficulty is not concerning their nature, but concerning their relations and situation.'

[4] P. 481. In there showing that the senses alone cannot convince us of the external existence of body, he remarks that 'sounds, tastes, and smells appear not to have any existence in extension;' and (p. 483) 'as far as the senses are judges, all perceptions are the same in the manner of their existence.' Therefore perceptions of sight cannot have 'an existence in extension' any more than 'sounds, tastes, and smells;' and if so, how can 'existence in extension' be a perception?

'distance' from each other[1]—should be an impression, while it is admitted that the same relation between 'bodies' cannot be so?

No logical alternative between identifying space with colour, and admitting an idea not copied from an impression.

251. To have plainly admitted that it was not an impression must have compelled Hume either to discard the 'abstract idea' with which geometry deals, or to admit the possibility of ideas other than 'fainter impressions.' It is a principle on which he insists with much emphasis and repetition, that whatever 'objects,' 'impressions,' or 'ideas' are distinguishable are also separable.[2] Now if there is an abstract idea of extension, it can scarcely be other than distinguishable, and consequently (according to Hume's account of the relation of idea to impression) derived from a distinguishable and therefore separable impression. It would seem then that Hume cannot escape conviction of one of two inconsistencies; either that of supposing a separate impression of extension, which yet is not of the nature of any assignable sensation; or that of supposing an abstract idea of it in the absence of any such impression. We shall find that he does not directly face either horn of the dilemma, but evades both of them. He admits that 'the ideas of space and time are no separate and distinct ideas, but merely those of the manner or order in which objects' (*s. c.* impressions) 'exist.'[3] In the Fourth Book, where the equivalence of impression to feeling is more consistently carried out, the fact that what is commonly reckoned an impression is really a judgment about the 'manner of existence,' as opposed to the 'nature,' of impressions, is taken as sufficient proof that it is no impression at all; and if not an impression, therefore not an idea.[4] He thus involuntarily recognized the true difference between feeling and thought, between the mere occurrence of feelings and the presentation of that occurrence by the self-conscious subject to itself; and, if only he had known what he was about in the recognition, might have anticipated Kant's distinction between the matter and form of sensation. In the Second Book, however, he will neither say explicitly that space is an impression of colour or a compound of colours—that would be to extinguish geometry; nor yet that it is impression of sense separate from that of colour—that would lay him open to the retort that he was

[1] Above, paragraphs 235 and 244.
[2] P. 319, 326, 332, 335, 518.
[3] P. 346.
[4] P. 480.

virtually introducing a sixth sense; nor on the other hand will he boldly avow of it, as he afterwards does of body, that it is a fiction. He denies that it is a separate impression, so far as that is necessary for avoiding the challenge to specify the sense through which it is received; he distinguishes it from a mere impression of sight, when it is necessary to avoid its simple identification with colour. By speaking of it as 'the manner in which objects exist'—so long as he is not confronted with the declarations of the Fourth Book or with the question how, the objects being impressions, their order of existence can be at once that of succession in time and of co-existence in space—he gains the credit for it of being a datum of sight, yet so far distinct from colour as to be a possible 'foundation for an abstract idea,' representative also of objects not coloured at all but tangible. At the same time, if pressed with the question how it could be an impression of sight and yet not interchangeable with colour, he could put off the questioner by reminding him that he never made it a 'separate or distinct impression, but one of the manner in which objects exist.'

In his account of the idea as *abstract*, Hume really introduces distinction between feeling and conception;

252. Disguise it as he might, however, the admission that there was in some sense an abstract idea of space, which the existence of geometry required of him, really carried with it the admission either of a distinct impression of the same, or of some transmuting process by which the idea may become what the impression is not. His way of evading this consequence has been already noticed in our examination of his doctrine of 'abstract ideas' generally, though without special reference to extension.[1] It consists in asserting figure and colour to be 'really,' or as an impression, 'the same and indistinguishable,' but different as 'relations and resemblances' of the impression; in other words, different according to the 'light in which the impression is considered' or 'the aspect in which it is viewed.' Of these 'separate resemblances and relations,' however, are there ideas or are there not? If there are not, they are according to Hume nothing of which we are conscious at all; if there are, there must be distinguishable, and therefore separable, impressions corresponding. To say then that figure and colour form one and the same indistinguishable impression, and yet that they constitute

[1] Above, paragraph 218.

'different resemblances and relations,' without such explanation as Hume cannot consistently give, is in fact a contradiction in terms. The true explanation is that the 'impression' has a different meaning, when figure and colour are said to be inseparable in the impression, from that which it has when spoken of as a subject of different resemblances and relations. In the former sense it is the feeling pure and simple—*one* as presented singly in time, after another and before a third. In this sense it is doubtless insusceptible of distinction into qualities of figure and colour, because (for reasons already stated) it can have no qualities at all. But the 'simplicity in which many different resemblances and relations may be contained' is quite other than this singleness. It is the unity of an object thought of under manifold relations—a unity of which Hume, reducing all consciousness to 'impression' and impression to feeling, has no consistent account to give. Failing such an account, the unity of the intelligible object, and the singleness of the feeling in time, are simply confused with each other. It is only an object as thought of, not a feeling as felt, that can properly be said to have qualities at all; while it is only because it is still regarded as a feeling that qualities of it, which cannot be referred to separate impressions, are pronounced the same and indistinguishable. If the idea of space is other than a feeling grown fainter, the sole reason for regarding it as originally an impression of colour disappears; if it *is* such a feeling, it cannot contain such 'different resemblances and relations' as render it representative of objects not only coloured in every possible way, but not coloured at all.

253. It is thus by playing fast and loose with the difference between feeling and conception that Hume is able, when the character of extension as an intelligible relation is urged, to reply that it is the same with the feeling of colour; and on the other hand, when asked how there then can be an abstract idea of it, to reply that this does not mean a separate idea, but coloured objects considered under a certain relation, viz. under that which consists in the disposition of their parts. The most effective way of meeting him on his own ground is to ask him how it is, since 'consideration' can only mean a succession of ideas, and ideas are fainter impressions, that extension, being one and the same impression with colour, can by any 'consideration'

yet avoids appearance of doing so, by treating 'consideration' of the relations of a felt thing as if it were itself the feeling.

become so different from it as to constitute a resemblance to objects that are not coloured at all. The true explanation, according to his own terminology, would be that the resemblance between the white globe and all other globes, being a resemblance not of impressions but of such relations between impressions as do not 'depend on the nature of the impressions' related, is unaffected by the presence or absence of colour or any other sensation. Of such relations, however, there can properly, if ideas are fainter impressions, be no ideas at all. In regard to those of cause and identity Hume virtually admits this; but the 'propensities to feign,' by which in the case of these latter relations he tries to account for the appearance of there being ideas of them, cannot plausibly be applied to relations in space and time, of which, as we shall see, ideas must be assumed in order to account for the 'fictions' of body and necessary connexion. Since then they cannot be derived from any separate impression without the introduction in effect of a sixth sense, and since all constitutive action of thought as distinct from feeling is denied by Hume, the only way to save appearances is to treat the order in which a multitude of impressions present themselves as the same with each impression, even though immediately afterwards it may have to be confessed, that it is so independent of the nature of any or all of the impressions as to be the foundation of an abstract idea, which is representative of other impressions having nothing whatever in common with them but the order of appearance. This once allowed—an abstract idea having been somehow arrived at which is not really the copy of any impression—it is easy to argue back from the abstract idea to an impression, and because there is an idea of the composition of points to substitute a 'composition of coloured points' for colour as the original impression. From such impression, being already extension, the idea of extension can undoubtedly be abstracted.

Summary of contradictions in his account of extension.

254. We now know what becomes of 'extended matter' when the doctrine, which has only to be stated to find acceptance, that we cannot 'look for anything anywhere but in our ideas'—in other words that for us there is no world but consciousness—is fairly carried out. Its position must become more and more equivocal, as the assumption, that consciousness reveals to us an alien matter, has in one after

another of its details to be rejected, until a principle of synthesis within consciousness is found to explain it. In default of this, the feeling consciousness has to be made to take its place as best it may; which means that what is said of it as feeling has to be unsaid of it as extended, and *vice versâ*. As *feeling*, it carries no reference to anything other than itself, to an object of which it is a quality; as *extended*, it is a qualified object. As *extended* again, its qualities are relations of coexistent parts; as *feeling*, it is an unlimited succession, and therefore, not being a possible whole, can have no parts at all. Finally as *feeling*, it must in each moment of existence either be 'on the same footing' with pain and pleasure or else—a distinction between impressions of sensation and reflection being unwarrantably admitted—be a colour, a taste, a sound, a smell, or 'tangibility;' as *extended*, it is an 'order of appearance' or 'disposition of corpuscles,' which, being predicable indifferently at any rate of two of these sensations, can no more be the same with either than either can be the same with the other. It is not the fault of Hume but his merit that, in undertaking to maintain more strictly than others the identification of extension with feeling, he brought its impossibility more clearly into view. The pity is that having carried his speculative enterprise so far before he was thirty, he allowed literary vanity to interfere with its consistent pursuit, caring only to think out the philosophy which he inherited so far as it enabled him to pose with advantage against Mystics and Dogmatists, but not to that further issue which is the entrance to the philosophy of Kant.

He gives no account of quantity as such.

255. As it was, he never came fairly to ask himself the fruitful question, How the sciences of quantity 'continuous and discreet,' which undoubtedly do exist, are possible to a merely feeling consciousness, because, while professedly reducing all consciousness to this form, he still allowed himself to interpret it in the terms of these sciences and, having done so, could easily account for their apparent 'abstraction' from it. If colour is already for feeling a magnitude, as is implied in calling it a 'composition of coloured points,' the question, how a knowledge of magnitude is possible, is of course superfluous. It only remains to deal, as Hume professes to do, with the apparent abstraction

in mathematics of magnitude from colour and the consequent suppositions of pure space and infinite divisibility. Any ulterior problem he ignores. That magnitude is not any the more a feeling for being 'endowed with colour' he shows no suspicion. He pursues his 'sensationalism' in short, in its bearing on mathematics, just as far as Berkeley did and no further. The question at issue, as he conceived it, was not as to the possibility of magnitude altogether, but only as to the existence of a vacuum; not as to the possibility of number altogether, but only as to the infinity of its parts. Just as he takes magnitude for granted as found in extension, and extension as equivalent to the feeling of colour, so he takes number for granted, without indeed any explicit account of the impression in which it is to be found, but apparently as found in time, which again is identified with the succession of impressions. In the second part of the Treatise, though the idea of number is assumed and an account is given of it which is supposed to be fatal to the infinite divisibility of extension, we are told nothing of the impression or impressions from which it is derived. In the Fourth Part, however, there is a passage in which a certain consideration of time is spoken of as its source.

His account of the relation between Time and Number.

256. In the latter passage, in order to account for the idea of identity, he is supposing 'a single object placed before us and surveyed for any time without our discovering in it any variation or interruption.' 'When we consider any two points of this time,' he proceeds, 'we may place them in different lights. We may either survey them at the very same instant; in which case they give us the idea of number, both by themselves and by the object, which must be multiplied in order to be conceived at once, as existent in these two different points of time: or, on the other hand, we may trace the succession of time by a like succession of ideas, and conceiving first one moment, along with the object then existent, imagine afterwards a change in the time without any variation or interruption in the object; in which case it gives us the idea of unity.'[1]

What does it come to?

257. A slight scrutiny of this passage will show that it is a prolonged tautology. The difference is merely verbal between the processes by which the ideas of number and unity

[1] P. 490.

are severally supposed to be given, except that in the former process it is the moment of surveying the times that is supposed to be one, while the times themselves are many; in the latter it is the object that is supposed to be one, but the times many. According to the second version of the former process—that according to which the different times surveyed together are said to give the idea of number 'by their object'—even this difference disappears. The only remaining distinction is that in the one case the object is supposed to be given as one, 'without interruption or variation,' but to become multiple as conceived to exist in different moments; in the other the objects are supposed to be given as manifold, being ideas presented in successive times, but to become one through the imaginary restriction of the multiplicity to the times in distinction from the object. Undoubtedly any one of these verbally distinct processes will yield indifferently the ideas of number and of unity, since these ideas in strict correlativity are presupposed by each of them. 'Two points of time surveyed at the same time' will give us the idea of number because, being a duality in unity, they are already a number. So, too, and for the same reason, will the object, one in itself but multiple as existent at different times. Nor does the idea given by imagining ideas, successively presented, to be 'one uninterrupted object,' differ from the above more than many-in-one differs from one-in-many. The real questions of course are, How two times can be surveyed at one time; how a single object can be multiplied or become many; how a succession of ideas can be imagined to be an unvaried and uninterrupted object. To these questions Hume has no answer to give. His reduction of thought to feeling logically excluded an answer, and the only alternative for him was to ignore or disguise them.

258. In the passage from part II. of the Treatise, already referred to, he distinctly tells us that the unity to which existence belongs excludes multiplicity. 'Existence itself belongs to unity, and is never applicable to number but on account of the unites of which the number is composed. Twenty men may be said to exist, but 'tis only because one, two, three, four, &c., are existent. . . . . A unite, consisting of a number of fractions, is merely a fictitious denomination, which the mind may apply to any quantity of

Unites alone really exist: number a 'fictitious denomination.'

objects it collects together; nor can such an unity any more exist alone than number can, as being in reality a true number. But the unity which can exist alone, and whose existence is necessary to that of all number, is of another kind and must be perfectly indivisible and incapable of being resolved into any lesser unity.'[1] What then is the 'unity which can exist alone'? The answer, according to Hume, must be that it is an impression separately felt and not resoluble into any other impressions. But then the question arises, how a succession of such impressions can form a number or sum; and if they cannot, how the so-called real unity or separate impression can in any sense be a unite, since a unite is only so as one of a sum. To put the question otherwise, Is it not the case that a unite has no more meaning without number than number without unites, and that every number is not only just such a 'fictitious denomination,' as Hume pronounces a 'unite consisting of a number of fractions' to be, but a fiction impossible for our consciousness according to Hume's account of it? It will not do to say that such a question touches only the fiction of 'abstract number,' but not the existence of numbered objects; that (to take Hume's instance) twenty men exist with the existence of each individual man, each real unit, of the lot. It is precisely the numerability of objects—not indeed their existence, if that only means their successive appearance, but their existence *as a sum*—that is in question. If such numerability is possible for such a consciousness as Hume makes ours to be; in other words, if he can explain the fact that we count; 'abstract number' may no doubt be left to take care of itself. Is it then possible? 'Separate impressions' mean impressions felt at different times, which accordingly can no more co-exist than, to use Hume's expression, 'the year 1737 can concur with the year 1738;' whereas the constituents of a sum must, as such, co-exist. Thus when we are told that 'twenty may be said to exist because one, two, three, &c., are existent,' the alleged reason, understood as Hume was bound to understand it, is incompatible with the supposed consequence. The existence of an object would, to him, mean no more than the occurrence of an impression; but that one impression should occur, and then

Yet 'unites' and 'number' are correlative; and the supposed fiction unaccountable.

[1] P. 338.

another and then another, is the exact opposite of their co-existence as a sum of impressions, and it is such co-existence that is implied when the impressions are counted and pronounced so many. Thus when Hume tells us that a single object, by being 'multiplied in order to be conceived at once as existent in different points of time,' gives us the idea of number, we are forced to ask him what precisely it is which thus, being one, can become manifold. Is it a 'unite that can exist alone'? That, having no parts, cannot become manifold by resolution. 'But it may by repetition?' No, for it is a separate impression, and the repetition of an impression cannot co-exist, so as to form one sum, with its former occurrence. 'But it may be *thought of* as doing so?' No, for that, according to Hume, could only mean that feelings might concur in a fainter stage though they could not in a livelier. Is the single object then a unite which already consists of parts? But that is a 'fictitious denomination,' and presupposes the very idea of number that has to be accounted for.

Idea of time even more unaccountable on Hume's principles.

259. The impossibility of getting number, as a many-in-one, out of the succession of feelings, so long as the self is treated as only another name for that succession, is less easy to disguise when the supposed units are not merely given in succession, but are actually the moments of the succession; in other words, when time is the many-in-one to be accounted for. How can a multitude of feelings of which no two are present together, undetermined by relation to anything other than the feelings, be at the same time a consciousness of the relation between the moments in which the feelings are given, or of a sum which these moments form? How can there be a relation between 'objects' of which one has ceased before the other has begun to exist? 'For the same reason,' says Hume, 'that the year 1737 cannot concur with the present year 1738, every moment must be distinct from, and posterior or antecedent to, another.'[1] How then can the present moment form one sum with all past moments, the present year with all past years; the sum which we indicate by the number 1738? The answer of common sense of course will be that, though the feeling of one moment is really past before that of another begins, yet thought retains the former, and combining it with the latter, gets the idea of time both

[1] P. 338.

as a relation and as a sum. Such an answer, however, implies that the retaining and combining thought is other than the succession of the feelings, and while it takes this succession to be the reality, imports into it that determination by the relations of past and present which it can only derive from the retaining and combining thought opposed to it. It is thus both inconsistent with Hume's doctrine, which allows no such distinction between thought, *i.e.* the succession of ideas, and the succession of impressions, and inconsistent with itself. Yet Hume by disguising both inconsistencies contrives to avail himself of it. By tacitly assuming that a conception of 'the manner in which impressions appear to the mind' is given in and with the occurrence of the impressions, he imports the consciousness of time, both as relation and as numerable quantity, into the sequence of impressions. He thus gains the advantage of being able to speak of this sequence indifferently under predicates which properly exclude each other. He can make it now a consciousness in time, now a consciousness of itself as in time; now a series that cannot be summed, now a conception of the sum of the series. The sequence of feelings, then, having been so dealt with as to make it appear in effect that time can be *felt*, that it should be *thought of* can involve no further difficulty. The conception, smuggled into sensitive experience as an 'impression,' can be extracted from it again as 'idea,' without ostensible departure from the principle that the idea is only the weaker impression.

His ostensible explanation of it.

260. 'The idea of time is not derived from a particular impression mixed up with others and plainly distinguishable from them, but arises altogether from the manner in which impressions appear to the mind, without making one of the number. Five notes played on the flute give us the impression and idea of time, though time be not a sixth impression which presents itself to the hearing or any other of the senses. Nor is it a sixth impression which the mind by reflection finds in itself. These five sounds, making their appearance in this particular manner, excite no emotion or affection in the mind, which being observed by it can give rise to a new idea. For *that* is necessary to produce a new idea of reflection; nor can the mind, by revolving over a thousand times all its ideas of sensation, ever extract from them any new original idea, unless nature has so framed its

faculties that it feels some new original impression arise from such a contemplation. But here it only takes notice of the *manner* in which the different sounds make their appearance, and that it may afterwards consider without considering these particular sounds, but may conjoin it with any other objects. The ideas of some objects it certainly must have, nor is it possible for it without these ever to arrive at any conception of time; which, since it appears not as any primary distinct impression, can plainly be nothing but different ideas or impressions or objects disposed in a certain manner, *i.e.* succeeding each other.' [1]

It turns upon equivocation between feeling and conception of relations between felt things.

261. In this passage the equivocation between 'impression' as feeling, and 'impression' as conception of the manner in which feelings occur, is less successfully disguised than is the like equivocation in the account of extension—not indeed from any failure in Hume's power of statement, but from the nature of the case. In truth the mere reproduction of impressions can as little account for the one conception as for the other. Just as, in order to account for the 'impression' from which the abstract idea of space may be derived, we have to suppose first that the feeling of colour, through being presented by the self-conscious subject to itself, becomes a coloured thing, and next, that this thing is viewed as a whole of parts limiting each other; so, in order to account for the 'impression' from which the idea of time may be abstracted, we have to suppose the presentation of the succession of feelings to a consciousness not in succession, and the consequent view of such presented succession as a sum of numerable parts. It is a relation only possible for a thinking consciousness—a relation, in Hume's language, not depending on the nature of the impressions related—that has in each case to be introduced into experience in order to be extracted from it again by 'consideration:' but there is this difference, that in one case the relation is not really between feelings at all, but between things or parts of a thing; while in the other it is just that relation between feelings, the introduction of which excludes the possibility that any feeling should be the consciousness of the relation. Thus to speak of a feeling of extension does not involve so direct a contradiction as to speak in the same way of time. The reader gives Hume the benefit of a way of thinking which Hume's

[1] P. 343.

own theory excludes. Himself distinguishing between feeling and felt thing, and regarding extension as a relation between parts of a thing, he does not reflect that for Hume there is no such distinction; that a 'feeling of extension' means that feeling is extended, which again means that it has co-existent parts; and that what is thus said of feeling as *extended* is incompatible with what is said of it as *feeling*. But when it comes to a 'feeling of time'—a feeling of the successiveness of all feelings—the incompatibility between what is said of feeling as the object and what is implied of it as the subject is less easy to disguise. In like manner because we cannot really think of extension as being that which yet according to Hume it is, it does not strike us, when he speaks of it as coloured or of colour as extended, that he is making one feeling a quality of another. But it would be otherwise if any specific feeling were taken as a quality of what is ostensibly a relation between all feelings. There is thus no 'sensible quality' with which time can be said to be 'endowed,' as extension with 'colour and solidity;' none that can be made to do the same duty in regard to it as these do in regard to extension, 'giving the idea' of it without actually being it.

He fails to assign any impression or compound of impressions from which idea of time is copied.

262. Hence, as the passage last quoted shows, in the case of time the alternative between ascribing it to a sixth sense, and confessing that it is not an impression at all, is very hard to avoid. It would seem that there is an impression of 'the manner in which impressions appear to the mind,' which yet is no 'distinct impression.' What, then, is it? It cannot be any one of the impressions of sense, for then it would be a distinct impression. It cannot be a 'compound impression,' for such composition is incompatible with that successiveness of all feelings to each other which is the object of the supposed impression. It cannot be any 'new original impression' arising from the contemplation of other impressions, for then, according to Hume, it would be 'an affection or emotion.' But after the exclusion of impressions of sense, compound impressions, and impressions of reflection, Hume's inventory of the possible sources of ideas is exhausted. To have been consistent, he ought to have dealt with the relation of time as he afterwards does with that of cause and effect, and, in default of an impression from which it could be derived, have reduced it to a figure of speech. But since the possibility

of accounting for the propensities to feign, which our language about cause and effect according to him represents, required the consciousness of relation in time, this course could not be taken. Accordingly after the possibility of time being an impression has been excluded as plainly as it can be by anything short of a direct negation, by a device singularly *naïf* it is made to appear as an impression after all. On being told that the consciousness of time is not a 'new original impression of reflection,' since in that case it would be an emotion or affection, but '*only* the notice which the mind takes of the manner in which impressions appear to it,' the reader must be supposed to forget the previous admission that it is no distinct impression at all, and to interpret this 'notice which the mind takes,' because it is not an impression of reflection, as an impression of sense. To make such interpretation easier, the account given of time earlier in the paragraph quoted is judiciously altered at its close, so that instead of having to ascribe to feeling a consciousness of 'the manner in which impressions appear to the mind,' we have only to ascribe to it the impressions so appearing. But this alteration admitted, what becomes of the 'abstractness' of the idea of time, *i.e.* of the possibility of its being 'conjoined with any objects' indifferently? It is the essential condition of such indifferent conjunction, as Hume puts it, that time should be only the manner of appearance as distinct from the impressions themselves. If time *is* the impressions, it must have the specific sensuous character which belongs to these. It must be a multitude of sounds, a multitude of tastes, a multitude of smells—these one after the other in endless series. How then can such a series of impressions become such an idea, *i.e.* so grow fainter as to be 'conjoined' indifferently 'with any impressions whatever'?

How can he adjust the exact sciences to his theory of space and time?

263. The case then between Hume and the conceptions which the exact sciences presuppose, as we have so far examined it, stands thus. Of the idea of quantity, as such, he gives no account whatever. We are told, indeed, that there are 'unites which can exist alone,' *i.e.* can be felt separately, and which are indivisible; but how such unites, being separate impressions, can form a sum or number, or what meaning a unite can have except as one of a number—how again a sum formed of separate unites can be a continuous whole or magnitude—we are not told at all. Of the ideas of space

and time we do find an account. They are said to be given in impressions, but, to justify this account of them, each impression has to be taken to be at the same time a consciousness of the manner of its own existence, as determined by relation to other impressions not felt along with it and as interpreted in a way that presupposes the unexplained idea of quantity. With this supposed origin of the ideas the sciences resting on them have to be adjusted. They may take the relations of number and magnitude, time and space, for granted, as 'qualities of perceptions,' and no question will be asked as to how the perceptions come to assume qualities confessed to be 'independent of their own nature.' It is only when they treat them in a way incompatible not merely with their being feelings—that must always be the case—but with their being relations between felt things, that they are supposed to cross the line which separates experimental knowledge from metaphysical jargon. So long then as space is considered merely as the relation of externality between objects of the 'outer,' time as that of succession between objects of the 'inner,' sense—in other words, so long as they remain what they are to the earliest self-consciousness and do not become the subject matter of any science of quantity—if we sink the difference between feelings and relations of felt things, and ask no questions about the origin of the distinction between outer and inner sense, they may be taken as data of sensitive experience. It is otherwise when they are treated as quantities, and it is their susceptibility of being so treated that, rightly understood, brings out their true character as the intelligible element in sensitive experience. But Hume contrives at once to treat them as quantities, thus seeming to give the exact sciences their due, and yet to appeal to their supposed origin in sense as evidence of their not having properties which, if they are quantities, they certainly must have. Having thus seemingly disposed of the purely intelligible character of quantity in its application to space and time, he can more safely ignore what he could not so plausibly dispose of—its pure intelligibility as number.

In order to seem to do so, he must get rid of 'Infinite Divisibility.'

264. The condition of such a method being acquiesced in is, that quantity in all its forms should be found reducible to ultimate unites or indivisible parts in the shape of separate impressions. Should it be found so, the whole question indeed, how ideas of relation are possible for a merely feeling

consciousness, would still remain, but mathematics would stand on the same footing with the experimental sciences, as a science of relations between impressions. Upon this reducibility, then, we find Hume constantly insisting. In regard to number indeed he could not ignore the fact that the science which deals with it recognizes no ultimate unite, but only such a one as 'is itself a true number.' But he passes lightly over this difficulty with the remark that the divisible unite of actual arithmetic is a 'fictitious denomination'—leaving his reader to guess how the fiction can be possible if the real unite is a separate indivisible impression—and proceeds with the more hopeful task of resolving space into such impressions. He is well aware that the constitution of space by impressions and its constitution by indivisible parts stand or fall together. If space is a compound impression, it is made up of indivisible parts, for there is a 'minimum visibile' and by consequence a minimum of imagination; and conversely, if its parts are indivisible, they can be nothing but impressions; for, being indivisible, they cannot be extended, and, not being extended, they must be either simple impressions or nothing. With that instinct of literary strategy which never fails him, Hume feels that the case against infinite divisibility, from its apparent implication of an infinite capacity in the mind, is more effective than that in favour of space being a compound impression, and accordingly puts that to the front in the Second Part of the Treatise, in order, having found credit for establishing it, to argue back to the constitution of space by impressions. In fact, however, it is on the supposed composition of all quantity from separate impressions that his argument against its infinite divisibility rests.

Quantity made up of impressions, and there must be a least possible impression.

265. The essence of his doctrine is contained in the following passages: ''Tis certain that the imagination reaches a *minimum*, and may raise up to itself an idea, of which it cannot conceive any subdivision, and which cannot be diminished without a total annihilation. When you tell me of the thousandth and ten thousandth part of a grain of sand, I have a distinct idea of these numbers and of their several proportions, but the images which I form in my mind to represent the things themselves are nothing different from each other nor inferior to that image by which I represent the grain of sand itself, which is supposed so vastly to

exceed them. What consists of parts is distinguishable into them, and what is distinguishable is separable. But whatever we may imagine of the thing, the idea of a grain of sand is not distinguishable nor separable into twenty, much less into a thousand, ten thousand, or an infinite number of different ideas. 'Tis the same case with the impressions of the senses as with the ideas of the imagination. Put a spot of ink upon paper, fix your eye upon that spot, and retire to such a distance that at last you lose sight of it; 'tis plain that the moment before it vanished the image or impression was perfectly indivisible. 'Tis not for want of rays of light striking on our eyes that the minute parts of distant bodies convey not any sensible impression; but because they are removed beyond that distance at which their impressions were reduced to a *minimum*, and were incapable of any further diminution. A microscope or telescope, which renders them visible, produces not any new rays of light, but only spreads those which always flowed from them; and by that means both gives parts to impressions, which to the naked eye appear simple and uncompounded, and advances to a minimum what was formerly imperceptible.'[1] (Part II. § 1.)

Yet it is admitted that there is an idea of number not made up of impressions.

266. In this passage it will be seen that Hume virtually yields the point as regards number. When he is told of the thousandth or ten thousandth part of a grain of sand he has 'a distinct idea of these numbers and of their different proportions,' though to this idea no distinct 'image' corresponds; in other words, though the idea is not a copy of any impression. It is of such parts *as parts of the grain of sand*—as parts of a 'compound impression'—that he can form no idea, and for the reason given in the sequel, that they are less than any possible impression, less than the 'minimum visibile.' This, it would seem, is a fixed quantity. That which is the least possible impression once is so always. Telescopes and microscopes do not alter it, but present it under conditions under which it could not be presented to the naked eye. Their effect, according to Hume, could not be to render that visible which existed unseen before, nor to reveal parts in that which previously had, though it seemed not to have, them—that would imply that an impression was 'an image of something distinct and external'—but either to

[1] P. 335.

present a simple impression of sight where previously there was none or to substitute a compound impression for one that was simple.[1] It is then because all divisibility is supposed to be into impressions, *i.e.* into feelings, and because there are conditions under which every feeling disappears, that an infinite divisibility is pronounced impossible. But the question is whether a finite divisibility into feelings is not just as impossible as an infinite one. Just as for the reasons stated above[2] a 'compound feeling' is impossible, so is the division of a compound into feelings. Undoubtedly if the 'minimum visibile' were a feeling it would not be divisible, but for the same reason it would not be a quantity. But if it is not a quantity, with what meaning is it called a minimum, and how can a quantity be supposed to be made up of such 'visibilia' as have themselves no quantity? In truth the 'minimum visibile' is not a feeling at all but a felt thing, conceived under attributes of quantity; in particular, as the term 'minimum' implies, under a relation of proportion to other quantities of which, if expressed numerically, Hume himself, according to the admission above noticed, would have to confess there was an idea which was an image of no impression. That which thought thus presents to itself as a thing doubtless has been a feeling; but, as thus presented, it is already other than and independent of feeling. With a step backward or a turn of the head, the feeling may cease, 'the spot of ink may vanish;' but the thing does not therefore cease to be a thing or to have quantity, which implies the possibility of continuous division.

A finite division into impressions no more possible than an infinite one.

267. It is thus the confusion between feeling and conception that is at the bottom of the difficulty about divisibility. For a consciousness formed merely by the succession of feelings, as there would be no *thing* at all, so there would be no parts of a thing—no addibility or divisibility. But Hume is forced by the exigencies of his theory to hold together, as best he may, the reduction of all consciousness to feeling and the existence for it of divisible objects. The consequence is his supposition of 'compound impressions' or feelings having parts, divisible into separate impressions

In Hume's instances it is not really a feeling, but a conceived thing, that appears as finitely divisible.

[1] It will be noticed that in the last sentence of the passage quoted, Hume assumes the convenient privilege of 'speaking with the vulgar,' and treats the 'minimum visibile' presented by telescope or microscope as representing something other than itself, which previously existed, though it was imperceptible.

[2] See above, §§ 241 & 246.

but divisible no further when these separate impressions have been reached. We find, however, that in all the instances he gives it is not really a feeling that is divided into feelings, but a thing into other things. It is the heap of sand, for instance, that is divided into grains, not the feeling which, by intellectual interpretation, represents to me a heap of sand that is divided into lesser feelings. I may feel the heap and feel the grain, but it is not a feeling that is the heap nor a feeling that is the grain. Hume would not offend common sense by saying that it was so, but his theory really required that he should, for the supposition that the grain is no further divisible when there are no separate impressions into which it may be divided, implies that in that case it is itself a separate impression, even as the heap is a compound one. But what difference, it may be asked, does it make to say that the heap and the grain are not feelings, but things conceived of, if it is admitted, as since Berkeley it must be, that the thing is nothing outside or independent of consciousness? Do we not by such a statement merely change names and invite the question how a thought can have parts, in place of the question how a feeling can have them?

Upon true notion of quantity infinite divisibility follows of course.

268. If thought were no more than Hume takes feeling to be, this objection would be valid. But if by thought we understand the self-conscious principle which, present to all feelings, forms out of them a world of mutually related objects, permanent with its own permanence, we shall also understand that the relations by which thought qualifies its object are not qualities of itself—that, in thinking of its object as made up of parts, it does not become itself a quantum. We shall also be on the way to understand how thought, detaching that relation of simple distinctness by which it has qualified its objects, finds before it a multitude of units of which each, as combining in itself distinctions from all the other units, is at the same time itself a multitude; in other words, finds a quantum of which each part, being the same in kind with the whole and all other parts, is also a quantum; *i.e.* which is infinitely divisible. When once it is understood, in short, that quantity is simply the most elementary of the relations by which thought constitutes the real world, as detached from this world and presented by thought to itself as a separate object, then infinite

divisibility becomes a matter of course. It is real just in so far as quantity, of which it is a necessary attribute, is real. If quantity, though not feeling, is yet real, that its parts should not be feelings can be nothing against their reality. This once admitted, the objections to infinite divisibility disappear; but so likewise does that mysterious dignity supposed to attach to it, or to its correlative, the infinitely addible, as implying an infinite capacity in the mind. From Hume's point of view, the mind being 'a bundle of impressions'—though how impressions, being successive, should form a bundle is not explained—its capacity must mean the number of its impressions, and, all divisibility being into impressions, it follows that infinite divisibility means an infinite capacity in the mind. This notion however arises, as we have shown, from a confusion between a *felt* division of an impossible 'compound feeling,' and that conceived divisibility of an object which constitutes but a single attribute of the object and represents a single relation of the mind towards it. There may be a sense in which all conception implies infinity in the conceiving mind, but so far from this doing so in any special way, it arises, as we have seen, from the presentation of objects under that very condition of endless, unremoved, distinction which constitutes the true limitation of our thought.

What are the ultimate elements of extension? If not extended, what are they?

269. When, as with Hume, it is only in its application to space and time that the question of infinite divisibility is treated, its true nature is more easily disguised, for the reason already indicated, that space and time are not necessarily considered as quanta. When Hume, indeed, speaks of space as a 'composition of parts' or 'made up of points,' he is of course treating it as a quantum; but we shall find that in seeking to avoid the necessary consequence of its being a quantum—the consequence, namely, that it is infinitely divisible—he can take advantage of the possibility of treating it as the simple, unquantified, relation of externality. We have already spoken of the dexterity with which, having shown that all divisibility, because into impressions, is into simple parts, he turns this into an argument in favour of the composition of space by impressions. 'Our idea of space is compounded of parts which are indivisible.' Let us take one of these parts, then, and ask what sort of idea it is: 'let us form a judgment of its nature and qualities.' ''Tis plain it

is not an idea of extension: for the idea of extension consists of parts; and this idea, according to the supposition, is perfectly simple and indivisible. Is it therefore nothing? That is impossible,' for it would imply that a real idea was composed of nonentities. The way out of the difficulty is to 'endow the simple parts with colour and solidity.' In words already quoted, 'that compound impression, which represents extension, consists of several lesser impressions, that are indivisible to the eye or feeling, and may be called impressions of atoms or corpuscles endowed with colour and solidity.' (Part II. § 3, near the end.)

Colours or coloured points? What is the difference?

270. It is very plain that in this passage Hume is riding two horses at once. He is trying so to combine the notion of the constitution of space by impressions with that of its constitution by points, as to disguise the real meaning of each. In what lies the difference between the feelings of colour, of which we have shown that they cannot without contradiction be supposed to 'make up extension,' and 'coloured points or corpuscles'? Unless the points, as points, mean something, the substitution of coloured points for colours means nothing. But according to Hume the point is nothing except as an impression of sight or touch. If then we refuse his words the benefit of an interpretation which his doctrine excludes, we find that there remains simply the impossible supposition that space consists of feelings. This result cannot be avoided, unless in speaking of space as composed of points, we understand by the point that which is definitely other than an impression. Thus the question which Hume puts—If extension is made up of parts, and these, being indivisible, are unextended, what are they?—really remains untouched by his ostensible answer. Such a question indeed to a philosophy like Locke's, which, ignoring the constitution of reality by relations, supposed real things to be first found and then relations to be superinduced by the mind—much more to one like Hume's, which left no mind to superinduce them—was necessarily unanswerable.

True way of dealing with the question.

271. In truth, extension is the relation of mutual externality. The constituents of this relation have not, as such, any nature but what is given by the relation. If in Hume's language we 'separate each from the others and, considering it apart, from a judgment of its nature and qualities,' by the very way we put the problem we render it insoluble or, more

properly, destroy it; for, thus separated, they have no nature. It is this that we express by the proposition which would otherwise be tautological, that extension is a relation between extended points. The 'points' are the simplest expression for those coefficients to the relation of mutual externality, which, as determined by that relation and no otherwise, have themselves the attribute of being extended and that only. If it is asked whether the points, being extended, are therefore divisible, the answer must be twofold. *Separately* they are not divisible, for separately they are nothing. Whether, as determined by mutual relation, they are divisible or no, depends on whether they are treated as forming a quantum or no. If they are not so treated, we cannot with propriety pronounce them to be either further divisible or not so, for the question of divisibility has no application to them. But being perfectly homogeneous with each other and with that which together they constitute, they are susceptible of being so treated, and *are* so treated when, with Hume in the passage before us, we speak of them as the parts of which extended matter consists. Thus considered as parts of a quantum and therefore themselves quanta, the infinite divisibility which belongs to all quantity belongs also to them.

272. In this lies the answers to the most really cogent argument which Hume offers against infinite divisibility. 'A surface terminates a solid; a line terminates a surface; a point terminates a line; but I assert that if the *ideas* of a point, line, or surface were not indivisible, 'tis impossible we should ever conceive these terminations. For let these ideas be supposed infinitely divisible, and then let the fancy endeavour to fix itself on the idea of the last surface, line, or point, it immediately finds this idea to break into parts; and upon its seizing the last of these parts it loses its hold by a new division, and so on *ad infinitum*, without any possibility of its arriving at a concluding idea.'[1] If 'point,' 'line,' or 'surface' were really names for 'ideas' either in Hume's sense, as feelings grown fainter, or in Locke's, as definite imprints made by outward things, this passage would be perplexing. In truth they represent objects determined by certain conceived relations, and the relation under which the object is considered may vary without a corresponding variation in the name. When a 'point' is considered simply as the

'If the point were divisible, it would be no termination of a line.' Answer to this.

[1] P. 345.

'termination of a line,' it is not considered as a quantum. It represents the abstraction of the relation of externality, as existing between *two lines*. It is these lines, not the point, that in this case are the constituents of the relation, and thus it is they alone that are for the time considered as extended, therefore as quanta, therefore as divisible. So when the line in turn is considered as the 'termination of a surface.' It then represents the relation of externality *as between surfaces*, and for the time it is the surfaces, not the line, that are considered to have extension and its consequences. The same applies to the view of a surface as the termination of a solid. Just as the line, though not a quantum when considered simply as a relation between surfaces, becomes so when considered in relation to another line, so the point, though it 'has no magnitude' when considered as the termination of a line, yet acquires parts, or becomes divisible, so soon as it is considered in relation to other points as a constituent of extended matter; and it is thus that Hume considers it, ἑκὼν ἢ ἄκων, when he talks of extension as 'made up of coloured points.'

What becomes of the exactness of mathematics according to Hume?

273. It is the necessity then, according to his theory, of making space an impression that throughout underlies Hume's argument against its infinite divisibility; and, as we have seen, the same theory which excludes its infinite divisibility logically extinguishes it as a quantity, divisible and measurable, altogether. He of course does not recognize this consequence. He is obliged indeed to admit that in regard to the proportions of 'greater, equal and less,' and the relations of different parts of space to each other, no judgments of universality or exactness are possible. We may judge of them, however, he holds, with various approximations to exactness, whereas upon the supposition of infinite divisibility, as he ingeniously makes out, we could not judge of them at all. He 'asks the mathematicians, what they mean when they say that one line or surface is equal to, or greater or less than, another.' If they 'maintain the composition of extension by indivisible points,' their answer, he supposes, will be that 'lines or surfaces are equal when the numbers of points in each are equal.' This answer he reckons 'just,' but the standard of equality given is entirely useless. 'For as the points which enter into the composition of any line or surface, whether perceived by the sight or touch, are so

minute and so confounded with each other that 'tis utterly impossible for the mind to compute their number, such a computation will never afford us a standard by which we may judge of proportions.' The opposite sect of mathematicians, however, are in worse case, having no standard of equality whatever to assign. 'For since, according to their hypothesis, the least as well as greatest figures contain an infinite number of parts, and since infinite numbers, properly speaking, can neither be equal nor unequal with respect to each other, the equality or inequality of any portion of space can never depend on any proportion in the number of their parts.' His own doctrine is 'that the only useful notion of equality or inequality is derived from the whole united appearance, and the comparison of, particular objects.' The judgments thus derived are in many cases certain and infallible. 'When the measure of a yard and that of a foot are presented, the mind can no more question that the first is longer than the second than it can doubt of those principles which are most clear and self-evident.' Such judgments, however, though 'sometimes infallible, are not always so.' Upon a 'review and reflection' we often 'pronounce those objects equal which at first we esteemed unequal,' and *vice versâ*. Often also 'we discover our error by a juxtaposition of the objects; or, where that is impracticable, by the use of some common and invariable measure which, being successively applied to each, informs us of their different proportions. And even this correction is susceptible of a new correction, and of different degrees of exactness, according to the nature of the instrument by which we measure the bodies, and the care which we employ in the comparison.' (Pp. 351–53.)

The universal propositions of geometry either untrue or unmeaning.

274. Such indefinite approach to exactness is all that Hume can allow to the mathematician. But it is undoubtedly another and an absolute sort of exactness that the mathematician himself supposes when he pronounces all right angles equal. Such perfect equality 'beyond what we have instruments and art' to ascertain, Hume boldly calls a 'mere fiction of the mind, useless as well as incomprehensible.'[1] Thus when the mathematician talks of certain angles as always equal, of certain lines as never meeting, he is either

[1] P. 353.

making statements that are untrue or speaking of nonentities. If his 'lines' and 'angles' mean ideas that we can possibly have, his universal propositions are untrue; if they do not, according to Hume they can mean nothing. He says, for instance, that 'two right lines cannot have a common segment;' but of such ideas of right lines as we can possibly have this is only true 'where the right lines incline upon each other with a sensible angle.'[1] It is not true when they 'approach at the rate of an inch in 20 leagues.' According to the 'original standard of a right line,' which is 'nothing but a certain general appearance, 'tis evident right lines may be made to concur with each other.'[2] Any other standard is a 'useless and incomprehensible fiction.' Strictly speaking, according to Hume, we have it not, but only a tendency to suppose that we have it arising from the progressive correction of our actual measurements.[3]

Distinction between Hume's doctrine and that of the hypothetical nature of mathematics.

275. Now it is obvious that what Hume accounts for by means of this tendency to feign, even if the tendency did not presuppose conditions incompatible with his theory, is not mathematical science as it exists. It has even less appearance of being so than (to anticipate) has that which is accounted for by those propensities to feign, which he substitutes for the ideas of cause and substance, of being natural science as it exists. In the latter case, when the idea of necessary connexion has been disposed of, an impression of reflection can with some plausibility be made to do duty instead; but there is no impression of reflection in Hume's sense of the word, no 'propensity,' that can be the subject of mathematical reasoning. He speaks, indeed, of our *supposing* some imaginary standard—of our having 'an obscure and implicit notion'—of perfect equality, but such language is only a way of saving appearances; for according to him, a 'supposition' or 'notion' which is neither impression nor idea, cannot be anything. A hasty reader, catching at the term 'supposition,' may find his statement plausible with all the plausibility of the modern doctrine, which accounts for the universality and exactness of mathematical truths as 'hypothetical'—the doctrine that we suppose figures exactly corresponding to our definitions, though such do

[1] Cf. Aristotle, *Metaph.* 998 a, on a corresponding view ascribed to Protagoras.

[2] P. 356.

[3] P. 354.

not really exist. With those who take this view, however, it is always understood that the definitions represent ideas, though not ideas to which real objects can be found exactly answering. Perhaps, if pressed about their distinction between idea and reality, they might find it hard consistently to maintain it, but it is by this practically that they keep their theory afloat. Hume can admit no such distinction. The real with him is the impression, and the idea the fainter impression. There can be no idea of a straight line, a curve, a circle, a right angle, a plane, other than the impression, other than the 'appearance to the eye,' and there are no appearances exactly answering to the mathematical definitions. If they do not *exactly* answer, they might as well for the purposes of mathematical demonstration not answer at all. The Geometrician, having found that the angles at the base of *this* isosceles triangle are equal to each other, at once takes the equality to be true of all isosceles triangles, as being exactly like the original one, and on the strength of this establishes many other propositions. But, according to Hume, no idea that we could have would be one of which the sides were precisely equal. The Fifth Proposition of Euclid then is not precisely true of the particular idea that we have before us when we follow the demonstration. Much less can it be true of the ideas, *i.e.* the several appearances of colour, indefinitely varying from this, which we have before us when we follow the other demonstrations in which the equality of the angles at the base of an isosceles is taken for granted.

276. Here, as elsewhere, what we have to lament is not that Hume 'pushed his doctrine too far,' so far as to exclude ideas of those exact proportions in space with which geometry purports to deal, but that he did not carry it far enough to see that it excluded all ideas of quantitative relations whatever. He thus pays the penalty for his equivocation between a feeling of colour and a disposition of coloured points. Even alongside of his admission that 'relations of space and time' are independent of the nature of the ideas so related, which amounts to the admission that of space and time there are no ideas at all in his sense of the word, he allows himself to treat 'proportions between spaces' as depending entirely on our ideas of the spaces—depending on ideas which in the context he by implication

The admission that no relations of quantity are data of sense removes difficulty as to general propositions about them.

admits that we have not.[1] If, instead of thus equivocating, he had asked himself how sensations of colour and touch could be added or divided, how one could serve as a measure of the size of another, he might have seen that only in virtue of that in the 'general appearance' of objects which, in his own language, is 'independent of the nature of the ideas themselves'—*i.e.* which does not belong to them as feelings, but is added by the comparing and combining thought—are the proportions of greater, less, and equal predicable of them at all; that what thought has thus added, viz. limitation by mutual externality, it can abstract; and that by such abstraction of the limit it obtains those several terminations, as Hume well calls them — the surface terminating bodies, the line terminating surfaces, the point terminating lines—from which it constructs the world of pure space: that thus the same action of thought in sense, which alone renders appearances measurable, gives an object matter which, because the pure construction of thought, we can measure exactly and with the certainty that the judgment based on a comparison of magnitudes in a single case is true of all possible cases, because in none of these can any other conditions be present than those which we have consciously put there.

Hume does virtually admit this in regard to numbers.

277. To have arrived at this conclusion Hume had only to extend to proportions in space the principle upon which the impossibility of sensualizing arithmetic compels him to deal with proportions in number. 'We are possessed,' he says, 'of a precise standard by which we can judge of the equality and proportion of numbers; and according as they correspond or not to that standard we determine their relations without any possibility of error. When two numbers are so combined, as that the one has always an unite answering to every unite of the other, we pronounce them equal.'[2] Now what are the unites here spoken of? If they were those single impressions which he elsewhere[3] seems to regard as alone properly unites, the point of the passage would be gone, for combinations of such unites could at any rate only yield those 'general appearances' of whose proportions we have been previously told there can be no precise standard. They can be no other than those

[1] Part III. § 1, sub init. [2] P. 374. [3] Above, par. 258.

unites which, not being impressions, he has to call 'fictitious denominations'—unites which are nothing except in relation to each other and of which each, being in turn divisible, is itself a true number. We can easily retort upon Hume, then, when he argues that the supposition of infinite divisibility is incompatible with any comparison of quantities because with any unite of measurement, that, according to his own virtual admission, in the only case where such comparison is exact the ultimate unite of measurement is still itself divisible; which, indeed, is no more than saying that whatever measures quantity must itself be a quantity, and that therefore quantity is infinitely divisible. If Hume, instead of slurring over this characteristic of the science of number, had set himself to explain it, he would have found that the only possible explanation of it was one equally applicable to the science of space—that what is true of the unite, as the abstraction of distinctness, is true also of the abstraction of externality. As the unite, because constituted by relation to other unites, so soon as considered breaks into multiplicity, and only for that reason is a quantity by which other quantities can be measured; so is it also with the limit in whatever form abstracted, whether as point, line, or surface. If the fact that number can have no least part since each part is itself a number or nothing, so far from being incompatible with the finiteness of number, is the consequence of that finiteness, neither can the like attribute in spaces be incompatible with their being definite magnitudes, that can be compared with and measured by each other. The real difference, which is also the rationale of Hume's different procedure in the two cases, is that the conception of space is more easily confused than that of number with the feelings to which it is applied, and which through such application become sensible spaces. Hence the liability to the supposition, which is at bottom Hume's, that the last feeling in the process of diminution before such sensible space disappears (being the 'minimum visibile') is the least possible portion of space.

278. Just as that reduction of consciousness to feeling, which really excludes the idea of quantity altogether, is by Hume only recognised as incompatible with its infinite divisibility, so it is not recognised as extinguishing space altogether, but only space as a vacuum. If it be true, he says, 'that the

With Hume idea of vacuum impossible, but logically not more

So than that of space.

idea of space is nothing but the idea of visible or tangible points distributed in a certain order, it follows that we can form no idea of vacuum, or space where there is nothing visible or tangible.'[1] Here as elsewhere the acceptability of his statement lies in its being taken in a sense which according to his principles cannot properly belong to it. It is one doctrine that the ideas of space and body are essentially correlative, and quite another that the idea of space is equivalent to a feeling of sight or touch. It is of the latter doctrine that Hume's denial of a vacuum is the corollary; but it is the former that gains acceptance for this denial in the mind of his reader. Space we have already spoken of as the relation of externality. If, abstracting this relation from the world of which it is the uniform but most elementary determination, we regard it as a relation between objects having no other determination, these become spaces and nothing but spaces—space pure and simple, *vacuum*. But we have known the world in confused fulness before we detach its constituent relations in the clearness of unreal abstraction. We have known bodies *συγκεχυμένως*, before we think their limits apart and out of these construct a world of pure space. It is thus in a sense true that in the development of our consciousness an idea of body precedes that of space, though the *abstraction* of space—the detachment of the relation so-called from the real complex of relations—precedes that of body; and it is this fact that, in the face of geometry, strengthens common sense in its position that an idea of vacuum is impossible. It is not, however, the inseparability of space from body whether in reality or for our consciousness, but its identity with a certain sort of feeling, that is implied in Hume's exclusion of the idea of vacuum. 'Body,' as other than feeling, is with him as much a fiction as vacuum. That there can be no idea of vacuum, is thus in fact merely his negative way of putting that proposition of which the positive form is, that space is a compound impression of sight and touch. Having examined that proposition in the positive, we need not examine it again in the negative form. It will be more to the purpose to enquire whether the 'tendency to suppose' or 'propensity to feign' by which, in the absence of any such idea, our language about 'pure space' has to be accounted

[1] P. 358.

for, does not according to Hume's own showing presuppose such an idea.

279. By vacuum he understands invisible and intangible extension. If an idea of vacuum, then, is possible at all, he argues, it must be possible for darkness and mere motion to convey it. That they cannot do so *alone* is clear from the consideration that darkness is 'no positive idea' and that an 'invariable motion,' such as that of a 'man supported in the air and softly conveyed along by some invisible power,' gives no idea at all. Neither can they do so when 'attended with visible and tangible objects.' 'When two bodies present themselves where there was formerly an entire darkness, the only change that is discoverable is in the appearance of these two objects: all the rest continues to be, as before, a perfect negation of light and of every coloured or tangible object.'[1] 'Such dark and indistinguishable distance between two bodies can never produce the idea of extension,' any more than blindness can. Neither can a like 'imaginary distance between tangible and solid bodies.' 'Suppose two cases, viz. that of a man supported in the air, and moving his limbs to and fro without meeting anything tangible; and that of a man who, feeling something tangible, leaves it, and after a motion of which he is sensible perceives another tangible object. Wherein consists the difference between these two cases? No one will scruple to affirm that it consists merely in the perceiving those objects, and that the sensation which arises from the motion is in both cases the same; and as that sensation is not capable of conveying to us an idea of extension, when unaccompanied with some other perception, it can no more give us that idea, when mixed with the impressions of tangible objects, since that mixture produces no alteration upon it.'[2] But though a 'distance not filled with any coloured or solid object' cannot give us an idea of vacuum, it is the cause why we falsely imagine that we can form such an idea. There are 'three relations'—*natural* relations according to Hume's phraseology[3]—between it and that distance which really 'conveys the idea of extension.' 'The distant objects affect the senses in the same manner, whether separated by the one distance or the other; the former species of distance is found capable of receiving the latter; and they

How it is that we talk as if we had idea of vacuum according to Hume.

[1] P. 362. [2] P. 363. [3] Above, § 206.

both equally diminish the force of every quality. These relations betwixt the two kinds of distance will afford us an easy reason why the one has so often been taken for the other, and why we imagine we have an idea of extension without the idea of any object either of the sight or feeling.'[1]

His explanation implies that we have an idea virtually the same.

280. It appears then that we have an idea of 'distance unfilled with any coloured or solid object.' To speak of this distance as 'imaginary' or fictitious can according to Hume's principles make no difference, so long as he admits, which he is obliged to do, that we actually have an idea of it; for every idea, being derived from an impression, is as much or as little imaginary as every other. And not only have we such an idea, but Hume's account of the 'relations' between it and the idea of extension implies that, *as ideas of distance*, they do not differ at all. But the idea of 'distance unfilled with any coloured or solid object' *is* the idea of vacuum. It follows that the idea of extension does not differ from that of vacuum, except so far as it is other than the idea of distance. But it is from the consideration of distance that Hume himself expressly derives it;[2] and so derived, it can no more differ from distance than an idea from a corresponding impression. Thus, after all, he has to all intents and purposes to admit the idea of vacuum, but saves appearances by refusing to call it extension—the sole reason for such refusal being the supposition that every idea, and therefore the idea of extension, must be a datum of sense, which the admission of an idea of 'invisible and intangible distance' already contradicts.

By a like device that he is able to explain the appearance of our having such ideas as Causation and Identity.

281. We now know the nature of that preliminary manipulation which 'impressions and ideas' have to undergo, if their association is to yield the result which Hume requires —if through it the succession of feelings is to become a knowledge of things and their relations. Such a result was required as the only means of maintaining together the two characteristic positions of Locke's philosophy; that, namely, the only world we can know is the world of 'ideas,' and that thought cannot originate ideas. Those relations, which Locke had inconsistently treated at once as intellectual superinductions and as ultimate conditions of reality, must be dealt with by one of two methods. They must be reduced to

[1] P. 364.

[2] Part II. § 3, sub. inst.

impressions where that could plausibly be done: where it could not, it must be admitted that we have no ideas of them, but only 'tendencies to suppose' that we have such, arising from the association, through 'natural relations,' of the ideas that we have. So dexterously does Hume work the former method that, of all the 'philosophical relations' which he recognizes, only Identity and Causation remain to be disposed of by the latter; and if the other relations—resemblance, time and space, proportion in quantity and degree in quality—could really be admitted as data of sense, there would at least be a possible basis for those 'tendencies to suppose' which, in the absence of any corresponding ideas, the terms 'Identity' and 'Causation' must be taken to represent. But, as we have shown, they can only be claimed for sense, if sense is so far one with thought—one not by conversion of thought into sense but by taking of sense into thought—as that Hume's favourite appeals to sense against the reality of intelligible relations become unmeaning. They may be 'impressions,' there may be 'impressions of them,' but only if we deny of the impression what Hume asserts of it, and assert of it what he denies—only if we understand by 'impression' *not* an 'internal and perishing existence;' *not* that which, if other than taste, colour, sound, smell or touch, must be a 'passion or emotion'; *not* that which carries no reference to an object other than itself, and which must *either* be single *or* compound; but something permanent and constituted by permanently coexisting parts; something that may 'be conjoined with' any feeling, because it is none; that always carries with it a reference to a subject which it is not but of which it is a quality; and that is both many and one, since 'in its simplicity it contains many different resemblances and relations.'

282. In the account just adduced of vacuum, the effect of that double dealing with 'impressions,' which we shall have to trace at large in Hume's explanation of our language about Causation and Identity, is already exhibited in little. Just as, after the idea of pure space has been excluded because not a copy of any possible impression, we yet find an 'idea,' only differing from it in name, introduced as the basis of that tendency to suppose which is to take the place of the excluded idea, so we shall find ideas of relation in the way of Identity and Causation—ideas which according to Hume we

have not—presupposed as the source of those 'propensities to feign' by which he accounts for the appearance of our having them.

Knowledge of relation in way of Identity and Causation excluded by Locke's definition of knowledge.

283. The primary characteristic of these relations according to Hume, which they share with those of space and time, and which in fact vitiates that definition of 'philosophical relation,' as depending on comparison, which he adopts, is that they 'depend not on the ideas compared together, but may be changed without any change in the ideas.'[1] It follows that they are not objects of knowledge, according to the definition of knowledge which Hume inherited, as 'the perception of agreement or disagreement between ideas.' A partial recognition of this consequence in regard to cause and effect we found in Locke's suspicion that a science of nature was impossible—impossible because, however often a certain 'idea of quality and substance' may have followed or accompanied another, such sequence or accompaniment never amounts to agreement or 'necessary connexion' between the ideas, and therefore never can warrant a general assertion, but only the particular one, that the ideas in question have so many times occurred in such an order. 'Matters of fact,' however, which no more consist in agreement of ideas than does causation, are by Locke treated without scruple as matter of knowledge when they can be regarded as relations between present sensations. Thus the 'particular experiment' in Physics constitutes knowledge—the knowledge, for instance, that a piece of gold is now dissolved in aqua regia; and when 'I myself see a man walk on the ice, it is knowledge.' In such cases it does not occur to him to ask, either what are the ideas that agree or how much of the experiment is a present sensation.[2] Nor does Hume commonly carry his analysis further. After admitting that the relations called 'identity and situation in time and place' do not depend on the nature of the ideas related, he proceeds: 'When both the objects are present to the senses along with the relation, we call *this* perception rather than reasoning; nor is there in this case any exercise of the thought or any action, properly speaking, but a mere passive admission of the impressions through the organs of sensation. According to this way of thinking, we ought not

[1] P. 372.

[2] Above, §§ 122 & 123.

to receive as reasoning any of the observations we may make concerning *identity* and the *relations* of *time* and *place*; since in none of them the mind can go beyond what is immediately present to the senses, either to discover the real existence or the relations of objects.' [1]

Inference a transition from an object perceived or remembered to one that is not so.

284. This passage points out the way which Hume's doctrine of causation was to follow. That in any case 'the mind should go beyond a present feeling, either to discover the real existence or the relations of objects' other than present feelings, was what he could not consistently admit. In the judgment of causation, however, it seems to do so. 'From the existence or action of one object,' seen or remembered, it seems to be assured of the existence or action of another, not seen or remembered, on the ground of a necessary connection between the two.[2] It is such assurance that is reckoned to constitute reasoning in the distinctive sense of the term, as different at once from the analysis of complex ideas and the simple succession of ideas—such reasoning as, in the language of a later philosophy, can yield synthetic propositions. What Hume has to do, then, is to explain this 'assurance' away by showing that it is not essentially different from that judgment of relation in time and place which, because the related objects are 'present to the senses along with the relation,' is called 'perception rather than reasoning,' and to which no 'exercise of the thought' is necessary, but a 'mere passive admission of impressions through the organs of sensation.' Nor, for the assimilation of reasoning to perception, is anything further needed than a reference to the connection of ideas with impressions and of the ideas of imagination with those of memory, as originally stated by Hume. When both of the objects compared are present to the senses, we call the comparison perception; when neither, or only one, is so present, we call it reasoning. But the difference between the object that is present to sense, and that which is not, is merely the difference between impression and idea, which again is merely the difference between the more and the less lively feeling.[3] To feeling, whether with more or with less vivacity, every object, whether of perception or reasoning, must alike be present. Is it then a sufficient account of the matter, according to Hume, to say that when we are conscious of contiguity and succession

[1] P. 376. [2] Pp. 376, 384. [3] Pp. 327, 375.

between objects of which both are impressions we call it perception; but that when both objects are ideas, or one an impression and the other an idea, we call it reasoning? Not quite so. Suppose that I 'have seen that species of object we call flame, and have afterwards felt that species of sensation we call heat.' If I afterwards remembered the succession of the feeling upon the sight, both objects (according to Hume's original usage of terms [1]) would be ideas as distinct from the impressions; or, if upon seeing the flame I remembered the previous experience of heat, one object would be an idea; but we should not reckon it a case of reasoning. 'In all cases wherein we reason concerning objects, there is only one either perceived or *remembered*, and the other is supplied in conformity to our past experience' —supplied by the only other faculty than memory that can 'supply an idea,' viz. imagination.[2]

Relation of cause and effect the same as this transition.

285. This being the only account of 'inference from the known to the unknown,' which Hume could consistently admit, his view of the relation of cause and effect must be adjusted to it. It could not be other than a relation either between impression and impression, or between impression and idea, or between idea and idea; and all these relations are equally between feelings that we experience. Thus, instead of being the 'objective basis' on which inference from the known to the unknown rests, it is itself the inference; or, more properly, it and the inference alike disappear into a particular sort of transition from feeling to feeling. The problem, then, is to account for its seeming to be other than this. 'There is nothing in any objects to persuade us that they are always *remote* or always *contiguous*; and when from experience and observation we discover that the relation in this particular is invariable, we always conclude that there is some secret *cause* which separates or unites them.'[3] It would *seem*, then, that the relation of cause and effect is something which we infer from experience, from the connection of impressions and ideas, but which is not itself impression or idea. And it would *seem* further, that, as we infer such an unexperienced relation, so likewise we make inferences from it. In regard to identity 'we readily suppose an object may continue individually the same, though several times absent from and present to the senses; and

[1] Above, par. 195. [2] Pp. 384, 388. [3] P. 376.

ascribe to it an identity, notwithstanding the interruption of the perception, whenever we conclude that if we had kept our hand or eye constantly upon it, it would have conveyed an invariable and uninterrupted perception. But this conclusion beyond the impressions of our senses can be founded only on the connection of *cause and effect*; nor can we otherwise have any security that the object is not changed upon us, however much the new object may resemble that which was formerly present to the senses.'

Yet seems other than this. How this appearance is to be explained.

286. This relation which, going beyond our actual experience, we seem to infer as the explanation of invariable contiguity in place or time of certain impressions, and from which again we seem to infer the identity of an object of which the perception has been interrupted, is what we call necessary connection. It is their supposed necessary connection which distinguishes objects related as cause and effect from those related merely in the way of contiguity and succession,[1] and it is a like supposition that leads us to infer what we do not see or remember from what we do. If then the reduction of thought and the intelligible world to feeling was to be made good, this supposition, not being an impression of sense or a copy of such, must be shown to be an 'impression of reflection,' according to Hume's sense of the term, *i.e.* a tendency of the soul, analogous to desire and aversion, hope and fear, derived from impressions of sense but not copied from them;[2] and the inference which it determines must be shown to be the work of imagination, as affected by such impression of reflection. This in brief is the purport of Hume's doctrine of causation.

Inference, resting on supposition of necessary connection, to be explained before that connection.

287. After his manner, however, he will go about with his reader. The supposed 'objective basis' of knowledge is to be made to disappear, but in such a way that no one shall miss it. So dexterously, indeed, is this done, that perhaps to this day the ordinary student of Hume is scarcely conscious of the disappearance. Hume merely announces to begin with that he will 'postpone the direct survey of this question concerning the nature of necessary connection,' and deal first with these other two questions, viz. (1) 'For what reason we pronounce it *necessary* that everything whose existence has a beginning, should also have a cause?' and (2) 'Why we conclude that such particular causes must *necessarily* have

[1] P. 376.

[2] Above, par. 195.

such particular effects; and what is the nature of that *inference* we draw from the one to the other, and of the *belief* we repose in it?' That is to say, he will consider the inference from cause or effect, before he considers cause and effect as a relation between objects, on which the inference is supposed to depend. Meanwhile necessary connection, as a relation between objects, is naturally supposed in some sense or other to survive. In *what* sense, the reader expects to find when these two preliminary questions have been answered. But when they have been answered, necessary connection, as a relation between objects, turns out to have vanished.

Account of the inference given by Locke and Clarke rejected.

288. With the first of the above questions Hume only concerns himself so far as to show that we cannot know either intuitively or demonstratively, in Locke's sense of the words, that 'everything whose existence has a beginning also has a cause.' Locke's own argument for the necessity of causation—that 'something cannot be produced by nothing'—as well as Clarke's—that 'if anything wanted a cause it would produce itself, *i.e.* exist before it existed'—are merely different ways, as Hume shows, of assuming the point in question. 'If everything must have a cause, it follows that upon exclusion of other causes we must accept of the object itself, or of nothing, as causes. But 'tis the very point in question, whether everything must have a cause or not.'[1] On that point, according to Locke's own showing, there can be no certainty, intuitive or demonstrative; for between the idea of beginning to exist and the idea of cause there is clearly no agreement, mediate or immediate. They are not similar feelings, they are not quantities that can be measured against each other, and to these alone can the definition of knowledge and reasoning, which Hume retained, apply. There thus disappears that last remnant of 'knowledge' in regard to nature which Locke had allowed to survive—the knowledge that there is a necessary connection, though one which we cannot find out.[2]

Three points to be explained in the inference according to Hume.

289. Having thus shown, as he conceives, what the true answer to the first of the above questions is not, Hume proceeds to show what it is by answering the second. 'Since it is not from knowledge or any scientific reasoning that we derive the opinion of the necessity of a cause to every new

[1] P. 382.

[2] Cf. Locke IV. 3, 29, and Introduc., par. 121.

production,' it must be from experience;[1] and every general opinion derived from experience is merely the summary of a multitude of particular ones. Accordingly when it has been explained why we infer particular causes from particular effects (and *vice versa*), the inference from every event to a cause will have explained itself. Now 'all our arguments concerning causes and effects consist both of an impression of the memory or senses, and of the idea of that existence which produces the object of the impression or is produced by it. Here, therefore, we have three things to explain, viz. *first*, the original impression; *secondly*, the transition to the idea of the connected cause or effect; *thirdly*, the nature and qualities of that idea.'[2]

a. The original impression from which the transition is made.

290. As to the original impression we must notice that there is a certain inconsistency with Hume's previous usage of terms in speaking of an *impression* of memory at all.[3] This, however, will be excused when we reflect that according to him impression and idea only differ in liveliness, and that he is consistent in claiming for the ideas of memory, not indeed the maximum, but a high degree of vivacity, superior to that which belongs to ideas of imagination. All that can be said, then, of that 'original impression,' whether of the memory or senses, which is necessary to any 'reasoning from cause or effect,' is that it is highly vivacious. That the transition from it to the 'idea of the connected cause or effect' is not determined by reason, has already been settled. It could only be so determined, according to the received account of reason, if there were some agreement in respect of quantity or quality between the idea of cause and that of the effect, to be ascertained by the interposition of other ideas.[4] But when we examine any particular objects that we hold to be related as cause and effect, *e.g.* the sight of flame and the feeling of heat, we find no such agreement. What we *do* find is their 'constant conjunction' in experience, and 'conjunction' is equivalent to that 'contiguity in time and place,' which has already been pointed out as one of those 'natural relations' which act as 'principles of union' between ideas.[5] Because the impression of flame has always been found to be followed by the impression of heat, the idea

b. The transition

[1] P. 383.
[2] P. 385.
[3] Above, par. 195.
[4] Cf. Locke IV. 17, 2.
[5] Above, par. 206.

to inferred idea.

of flame always suggests the idea of heat. It is simple custom then that determines the transition from the one to the other, or renders 'necessary' the connection between them. In order that the transition, however, may constitute an inference from cause to effect (or *vice versâ*), one of the two objects thus naturally related, but not both, must be presented as an impression. If both were impressions it would be a case of 'sensation, not reasoning;' if both were ideas, no belief would attend the transition. This brings us to the question as to the 'nature and qualities' of the inferred idea.

c. The qualities of this idea.

2 1. ''Tis evident that all reasonings from causes or effects terminate in conclusions concerning matter of fact, *i. e.* concerning the existence of objects or of their qualities';[1] in other words, in belief. If this meant a new idea, an idea that we have not previously had, it would follow that inference could really carry us beyond sense, that there could be an idea not copied from any prior impression. But according to Hume it does not mean this. 'The idea of existence is the very same with the idea of what we conceive to be existent;'[2] and not only so, 'the *belief* of existence joins no new ideas to those which compose the idea of the object. When I think of God, when I think of him as existent, and when I believe him to be existent, my idea of him neither increases nor diminishes.'[3] In what then lies the difference between incredulity and belief; between an 'idea assented to,' or an object believed to exist, and a fictitious object or idea from which we dissent? The answer is, 'not in the parts or composition of the idea, but in the manner of conceiving it,' which must be understood to mean the manner of 'feeling' it; and this difference is further explained to lie in 'the superior force, or vivacity, or steadiness' with which it is felt.[4] We are thus brought to the further question, how it is that this 'superior vivacity' belongs to the inferred idea when we 'reason' from cause to effect or from effect to cause. The answer here is that the 'impression of the memory or senses,' which in virtue of a 'natural relation' suggests the idea, also 'communicates to it a share of its force or vivacity.'

It results that necessary con-

292. Thus it appears that in order to the conclusion that any particular cause must have any particular effect, there is

[1] P. 394.
[2] P. 370.
[3] P. 395.
[4] P. 398. Cf. above, par. 170, for the corresponding view in Berkeley.

needed first the presence of an impression, and secondly the joint action of those two 'principles of union among ideas,' resemblance and contiguity. In virtue of the former principle the given impression calls up the image of a like impression previously experienced, which again in virtue of the latter calls up the image of its usual attendant, and the liveliness of the given impression so communicates itself to the recalled ideas as to constitute belief in their existence. If this is the true account of the matter, the question as to the nature of necessary connexion has answered itself. 'The necessary connexion betwixt causes and effects is the foundation of our inference from one to the other. The foundation of the inference is the transition arising from the accustomed union. These are therefore the same.'[1] We may thus understand how it is that there seems to be an idea of such connexion to which no impression of the senses, or (to use an equivalent phrase of Hume's) no 'quality in objects' corresponds. If the first presentation of two objects, of which one is cause, the other effect, (*i. e.* of which we afterwards come to consider one the cause, the other the effect) gives no idea of a connexion between them, as it clearly does not, neither can it do so however often repeated. It would not do so, unless the repetition 'either discovered or produced something new' in the objects; and it does neither. But it does 'produce a new impression in the mind.' After observing a 'constant conjunction of the objects, and an uninterrupted resemblance of their relations of contiguity and succession, we immediately feel a determination of the mind to pass from one of the objects to its usual attendant, and to conceive it in a stronger light on account of that relation.' It is of this 'internal impression,' this 'propensity which custom produces,' that the idea of necessary connexion is the copy.[2]

nection is an impression of reflection, i.e., a propensity to the transition described.

293. The sequence of ideas, which this propensity determines, clearly does not involve any inference 'beyond sense,' 'from the known to the unknown,' 'from instances of which we have had experience, to those of which we have had none,' any more than does any other 'recurrence of an idea'—which, as we have seen, merely means, according to Hume, the return of a feeling at a lower level of intensity after it has been felt at a higher. The idea which we speak of as an inferred cause or effect is only an 'instance of which we have no ex-

The transition not to anything beyond sense.

[1] P. 460.

[2] Pp. 457–460.

perience' in the sense of being *numerically different* from the similar ideas, whose previous constant association with an impression like the given one, determines the 'inference;' but in the same sense the 'impression' which I now feel on putting my hand to the fire is different from the impressions previously felt under the same circumstances, and I do not for that reason speak of this impression as an instance of which I have had no experience. Thus Hume, though retaining the received phraseology in reference to the 'conclusion from any particular cause to any particular effect'—phraseology which implies that prior to the inference the object inferred is in some sense unknown or unexperienced—yet deprives it of meaning by a doctrine which makes inference, as he himself puts it, 'a species of sensation,' 'an unintelligible instinct of our souls,' 'more properly an act of the sensitive than of the cogitative part of our natures'[1]—which in fact leaves no 'part of our natures' to be cogitative at all.

Nor determined by any objective relation.

294. We are not entitled then, it would seem, to say that any inference to matter of fact, any proof of an 'instructive proposition,'—as distinct from the conclusion of a syllogism, which is simply derived from the analysis of a proposition already conceded,—rests on the relation of cause and effect. Such language implies that the relation is other than the inference, whereas, in fact, they are one and the same, each being merely a particular sort of sequence of feeling upon feeling—that sort of which the characteristic is that, when the former feeling only has the maximum of vivacity, it still, owing to the frequency with which it has been attended by the other, imparts to it a large, though less, amount of vivacity. This is the naked result to which Hume's doctrine leads—a result which, thus put, might have set men upon reconsidering the first principles of the Lockeian philosophy. But he wished to find acceptance, and would not so put it. A consideration of the points in which he had to sacrifice consistency to plausibility—since he was always consistent where he decently could be—will lead us to the true *αἴτιον τοῦ ψευδοῦς*, the impossibility on his principles of explaining the world of knowledge.

Definitions of cause.

295. As the outcome of his doctrine, he submits two definitions of the relation of cause and effect. Considering

[1] Pp. 404, 475, and 471.

it as 'a *philosophical* relation or comparison of two ideas, we may define a *cause* to be an object precedent and contiguous to another, and where all objects resembling the former are placed in like relations of precedency and contiguity to those objects that resemble the latter.' Considering the relation as 'a *natural* one, or as an association between ideas,' we may say that 'a *cause* is an object precedent and contiguous to another, and so united with it that the idea of one determines the mind to form the idea of the other, and the impression of the one to form a more lively idea of the other.'[1]

a. As a 'philosophical' relation.

296. Our first enquiry must be how far these definitions are really consistent with the theory from which they are derived. At the outset, it is a surprise to find that the 'philosophical relation' of cause and effect, as distinct from the natural one, should still appear to survive. Such a distinction has no meaning unless it implies a conceived relation of objects other than the *de facto* sequence of feelings, of which one 'naturally' introduces the other. It is the characteristic of Locke's doctrine of knowledge that in it this distinction is still latent. His language constantly implies that knowledge, as a perception of relations, is other than the sequence of feelings; but by confining his view chiefly to relation in the way of likeness and unlikeness—a relation that exists between feelings merely as felt, or as they are for the feeling consciousness—he avoids the necessity of deciding what the 'ideas' are in the connection of which knowledge and reasoning consist, whether objects constituted by conceived relations or feelings suggestive of each other. But when once attention had been fixed, as it was by Hume, on an ostensible relation between objects, like that of cause and effect, which, if it exist at all, is clearly not one in the way of resemblance between feelings, the distinction spoken of becomes patent. If the colour red had not the likeness and unlikeness which it has to the colour blue, the colours would be different feelings from what they are; but if the flame of fire and its heat were not regarded severally as cause and effect, it would make no difference to them as feelings; or, to put it conversely, it is not upon any comparison of two feelings with each other that we regard them as related in the way of cause and effect. In what sense

Is Hume entitled to retain 'philosophical' relations as distinct from 'natural'?

[1] P. 464.

then can the relation between flame and heat be a philosophical relation, as defined by Hume—a relation in virtue of which we compare objects, or an idea that we acquire upon comparison?

Examination of Hume's language about them.

297. This definition, indeed, is not stated so exactly or so uniformly as might be wished. In different passages 'philosophical relation' appears as that in respect of which we compare any two ideas; as that of which we acquire the idea by comparing objects,[1] and finally (in the context of the passage last quoted) as itself the comparison.[2] The real source of this ambiguity lies in that impossibility of regarding an object as anything apart from its relations, which compels any theory that does not recognize it to be inconsistent with itself. It is Locke's cardinal doctrine that real 'objects' are first given as simple ideas, and that their relations, unreal in contrast with the simple ideas, are superinduced by the mind—a doctrine which Hume completes by excluding all ideas that are not either copies of simple feelings or compounds of these, and by consequence ideas of relation altogether. The three statements of the nature of philosophical relation, given above, mark three stages of departure from, or approach to, consistency with this doctrine. The first, implying as it does that relation is not merely a subjective result in our minds from the comparison of ideas, but belongs to the ideas themselves, is most obviously inconsistent with it according to the form in which it is presented by Locke; but the second is equally incompatible with Hume's completion of the doctrine, for it implies that we so compare ideas as to acquire an idea of relation other than the ideas put together—an idea at once open to Hume's own challenge, 'Is it a colour, sound, smell, &c.; or is it a passion or emotion?'

Philosophical relation consists in a comparison, but no comparison between cause and effect.

298. We are thus brought to the third statement, according to which philosophical relation, instead of being an idea acquired upon comparison, is itself the comparison. A comparison of ideas may seem not far removed from the simple sequence of resembling ideas; but if we examine the definition of cause, as stated above, which with Hume corresponds to the view of the relation of cause and effect as a '*philosophical*' one, we find that the relation in question is neither a comparison of the related objects

[1] Cf. Part I. 5. [2] P. 464.

nor an idea which arises upon such comparison. According to his statement a comparison is indeed necessary to give us an idea of the relation—a comparison, however, not of the objects which we reckon severally cause and effect with each other, but (*a*) of each of the two objects with other like objects, and (*b*) of the relation of precedency and contiguity between the two objects with that previously observed between the like objects. Now, unless the idea of relation between objects in the way of cause and effect is one that consists in, or is acquired by, comparison *of those objects*, the fact that another sort of comparison is necessary to constitute it does not touch the question of its possibility. However we come to have it, however reducible to impressions the objects may be, it is not only other than the idea of either object taken singly; it is not, as an idea of resemblance might be supposed to be, constituted by the joint presence or immediate sequence upon each other of the objects. Here, then, is an idea which is not taken either from an impression or from a compound of impressions (if such composition be possible), and this idea is 'the source of all our reasonings concerning matters of fact.'

The comparison is between present and past experience of succession of objects.

299. The modern followers of Hume may perhaps seek refuge in the consideration that though the relation of cause and effect between objects is not one in the way of resemblance or one of which the idea is given by comparison of the objects, it yet results from comparisons, which may be supposed to act like chemical substances whose combination produces a substance with properties quite different from those of the combined substances, whether taken separately or together. Some anticipation of such a solution, it may be said, we find in Hume himself, who is aware that from the repetition of impressions of sense and their ideas new, heterogeneous, impressions—those of 'reflection'—are formed. Of this more will be said when we come to Hume's treatment of cause and effect as a 'natural relation.' For the present we have to enquire what exactly is implied in the comparisons from which this heterogeneous idea of relation is derived. If we look closely we shall find that they presuppose a consciousness of relations as little reducible to resemblance, *i. e.* as little the result of comparison, as that of cause and effect itself. It has been already noticed how Hume treats the judgment of proportion between figures as a mere affair of

sense, because such relation depends entirely on the ideas compared, without reflecting that the existence of the figures presupposes those relations of space to which, because (as he admits) they do not depend on the comparison of ideas, the only excuse for reckoning any relation sensible does not apply. In the same way he contents himself with the fact that the judgment of cause and effect implies a comparison of present with past experience, and may thus be brought under his definition of 'philosophical relation,' without observing that the experiences compared are themselves by no means reducible to comparison. We judge that an object, which we now find to be precedent and contiguous to another, is its cause when, comparing present experience with past, we find that it always has been so. That in effect is Hume's account of the relation, 'considered as a philosophical one:' and it implies that the constitution of the several experiences compared involves two sorts of relation which Hume admits not to be derived from comparison, (*a*) relation in time and place, (*b*) relation in the way of identity.

Observation of succession already goes beyond sense.

300. As to relations in time and space, we have already traced out the inconsistencies which attend Hume's attempt to represent them as compound ideas. The statement at the beginning of Part III., that they are relations not dependent on the nature of compared ideas, is itself a confession that such representation is erroneous. If the difficulty about the synthesis of successive feelings in a consciousness that consists merely of the succession could be overcome, we might admit that the putting together of ideas might constitute such an idea of relation as depends on the nature of the combined ideas. But no combination of ideas can yield a relation which remains the same while the ideas change, and changes while they remain the same. Thus, when Hume tells us that 'in none of the observations we may make concerning relations of time and place can the mind go beyond what is immediately present to the senses, to discover the relations of objects,'[1] the statement contradicts itself. Either we can make no observation concerning relation in time and place at all, or in making it we already 'go beyond what is immediately present to the senses,' since we observe what is neither a feeling nor several feelings put together. If then Hume had succeeded in his reduction of reasoning from

[1] P. 376.

cause or effect to observation of this kind, as modified in a certain way by habit, the purpose for which the reduction is attempted would not have been attained. The separation between perception and influence, between 'intuition' and 'discourse,' would have been got rid of, but inference and discourse would not therefore have been brought nearer to the mere succession of feelings, for the separation between feeling and perception would remain complete; and that being so, the question would inevitably recur—If the 'observation' of objects as related in space and time already involves a transition from the felt to the unfelt, what greater difficulty is there about the interpretation of a feeling as a change to be accounted for (which is what is meant by inference to a cause), that we should do violence to the sciences by reducing it to repeated observation lest it should seem that in it we 'go beyond' present feeling?

As also does the 'observation concerning identity,' which the comparison involves.

301. Relation in the way of identity is treated by Hume in the third part of the Treatise[1] pretty much as he treats contiguity and distance. He admits that it does not depend on the nature of any ideas so related—in other words, that it is not constituted by feelings as they would be for a merely feeling consciousness—yet he denies that the mind 'in any observations we may make concerning it' can go beyond what is immediately present to the senses. Directly afterwards, however, we find that there *is* a judgment of identity which involves a 'conclusion beyond the impressions of our senses'—the judgment, namely, that an object of which the perception is interrupted continues individually the same notwithstanding the interruption. Such a judgment, we are told, is a supposition founded only on the connection of cause and effect. How any 'observation concerning identity' can be made without it is not there explained, and, pending such explanation, observations concerning identity are freely taken for granted as elements given by sense in the experience from which the judgment of cause and effect is derived. In the second chapter of Part IV., however, where 'belief in an external world' first comes to be explicitly discussed by Hume, we find that 'propensities to feign' are as necessary to account for the judgment of identity as for that of necessary connection. If that chapter had preceded, instead of following, the theory of cause and effect as given in Part III.,

[1] P. 376.

the latter would have seemed much less plain sailing than to most readers it has done. It is probably because nothing corresponding to it appears in that later redaction of his theory by which Hume sought popular acceptance, that the true suggestiveness of his speculation was ignored, and the scepticism, which awakened Kant, reduced to the commonplaces of inductive logic. To examine its purport is the next step to be taken in the process of testing the possibility of a 'natural history' of knowledge. Its bearing on the doctrine of cause will appear as we proceed.

Identity of objects an unavoidable crux for Hume.

302. The problem of identity necessarily arises from the fusion of reality and feeling. We must once again recall the propositions in which Hume represents this fusion—that 'everything which enters the mind is both in reality and appearance as the perception;' that 'so far as the senses are judges, all perceptions are the same in the manner of their existence;' that 'perceptions' are either impressions, or ideas which are 'fainter impressions;' and 'impressions are internal and perishing existences, and appear as such.' If these propositions are true—and the 'new way of ideas' inevitably leads to them—how is it that we *believe* in 'a *continued* existence of objects even when they are not present to the senses,' and an existence 'distinct from the mind and perception'? They are the same questions from which Berkeley derived his demonstration of an eternal mind—a demonstration premature because, till the doctrine of 'ideas,' and of mind as their subject, had been definitely altered in a way that Berkeley did not attempt, it was explaining a belief difficult to account for by one wholly unaccountable. Before Theism could be exhibited with the necessity which Locke claimed for it, it was requisite to try what could be done with association of ideas and 'propensities to feign' in the way of accounting for the world of knowledge, in order that upon their failure another point of departure than Locke's might be found necessary. The experiment was made by Hume. He has the merit, to begin with, of stating the nature of identity with a precision which we found wanting in Locke. 'In that proposition, *an object is the same with itself*, if the idea expressed by the word *object* were no ways distinguished from that meant by *itself*, we really should mean nothing.' 'On the other hand, a multiplicity of objects can never convey the idea of identity, however resembling

His account of it.

they may be supposed. . . . Since then both number and unity are incompatible with the relation of identity, it must lie in something that is neither of them. But at first sight this seems impossible.' The explanation is that when 'we say that an object is the same with itself, we mean that the object existent at one time is the same with itself existent at another. By this means we make a difference betwixt the idea meant by the word *object* and that meant by *itself* without going the length of number, and at the same time without restraining ourselves to a strict and absolute unity.' In other words, identity means the unity of a thing through a multiplicity of times; or, as Hume puts it, 'the invariableness and uninterruptedness of any object through a supposed variation of time.'[1]

303. Now that 'an object exists' can with Hume mean no more than that an 'impression' is felt, and without succession of feelings according to him there is no time.[2] It follows that unity in the existence of the object, being incompatible with *succession* of feelings, is incompatible also with existence in time. Either then the unity of the object or its existence at manifold times—both being involved in the conception of identity—must be a fiction; and since 'all impressions are perishing existences,' perishing with a turn of the head or the eyes, it cannot be doubted which it is that is the fiction. That the existence of an object, which we call the same with itself, is broken by as many intervals of time as there are successive and different, however resembling, 'perceptions,' must be the fact; that it should yet be one throughout the intervals is a fiction to be accounted for. Hume accounts for it by supposing that when the separate 'perceptions' have a strong 'natural relation' to each other in the way of resemblance, the transition from one to the other is so 'smooth and easy' that we are apt to take it for the 'same disposition of mind with which we consider one constant and uninterrupted perception;' and that, as a consequence of this mistake, we make the further one of taking the successive resembling perceptions for an identical, *i.e.* uninterrupted as well as invariable object.[3] But we cannot mistake one object for another unless we have an idea of that other object. If then we 'mistake the succession of our

Properly with him it is a fiction, in the sense that we have no such idea.

Yet he implies that we have such idea,

[1] Pp. 489, 490.

[2] 'Wherever we have no successive perceptions, we have no notion of time.' (p. 342).

[3] P. 492.

in saying that we mistake something else for it.

interrupted perceptions for an identical object,' it follows that we have an idea of such an object—of a thing one with itself throughout the succession of impressions—an idea which can be a copy neither of any one of the impressions nor, even if successive impressions could put themselves together, of all so put together. Such an idea being according to Hume's principles impossible, the appearance of our having it was the fiction he had to account for; and he accounts for it, as we find, by a 'habit of mind' which already presupposes it. His procedure here is just the same as in dealing with the idea of vacuum. In that case, as we saw, having to account for the appearance of there being the impossible idea of pure space, he does so by showing, that having 'an idea of distance not filled with any coloured or tangible object,' we mistake this for an idea of extension, and hence suppose that the latter may be invisible and intangible. He thus admits an idea, virtually the same with the one excluded, as the source of the 'tendency to suppose' which is to replace the excluded idea. So in his account of identity. Either the habit, in virtue of which we convert resembling perceptions into an identical object, is what Hume admits to be a contradiction, 'a habit acquired by what was never present to the mind;'[1] or the idea of identity must be present to the mind in order to render the habit possible.

Succession of like feelings mistaken for an identical object: but the feelings, as described, are already such objects.

304. The device by which this *petitio principii* is covered is one already familiar to us in Hume. In this case it is so palpable that it is difficult to believe he was unconscious of it. As he has 'to account for the belief of the vulgar with regard to the existence of body,' he will 'entirely conform himself to their manner of thinking and expressing themselves;' in other words, he will assume the fiction in question as the beginning of a process by which its formation is to be accounted for. The vulgar make no distinction between thing and appearance. 'Those very sensations which enter by the eye or ear are with them the true objects, nor can they readily conceive that this pen or this paper, which is immediately perceived, represents another which is different from, but resembling it. In order therefore to accommodate myself to their notions, I shall at first suppose that there is only a single existence, which I shall call indifferently *object* and *perception*, according as it shall seem best to suit my

[1] P. 487.

purpose, understanding by both of them what any common man may mean by a hat, or shoe, or stone, or any other impression conveyed to him by his senses.'[1] Now it is of course true that the vulgar are innocent of the doctrine of representative ideas. They do not suppose that this pen or this paper, which is immediately perceived, represents another which is different from, but resembling, it; but neither do they suppose that this pen or this paper is a sensation. It is the intellectual transition from this, that, and the other successive sensations to this pen or this paper, as the identical object to which the sensations are referred as qualities, that is unaccountable if, according to Hume's doctrine, the succession of feelings constitutes our consciousness. In the passage quoted he quietly ignores it, covering his own reduction of felt thing to feeling under the popular identification of the real thing with the perceived. With 'the vulgar' that which is 'immediately perceived' is the real thing, just because it is not the mere feeling which with Hume it is. But under pretence of provisionally adopting the vulgar view, he entitles himself to treat the mere feeling, because according to him it is that which is immediately perceived, as if it were the permanent identical thing, which according to the vulgar is what is immediately perceived.

Fiction of identity thus implied as source of the propensity which is to account for it.

305. Thus without professedly admitting into consciousness anything but the succession of feelings he gets such individual objects as Locke would have called objects of 'actual present sensation.' When 'I survey the furniture of my chamber,' according to him, I see sundry 'identical objects'—this chair, this table, this inkstand, &c.[2] So far there is no fiction to be accounted for. It is only when, having left my chamber for an interval and returned to it, I suppose the objects which I see to be identical with those I saw before, that the 'propensity to feign' comes into play, which has to be explained as above. But in fact the original 'survey' during which, seeing the objects, I suppose them to continue the same with themselves, involves precisely the same fiction. In that case, says Hume, I 'suppose the change' (which is necessary to constitute the idea of identity) 'to lie only in the time.' But without 'succession of perceptions,' different however resembling, there could according to him be no change of time. The continuous survey of this table, or this

[1] P. 491.

[2] P. 493.

chair, then, involves the notion of its remaining the same with itself throughout a succession of different perceptions—i.e. the full-grown fiction of identity—just as much as does the supposition that the table I see now is identical with the one I saw before. The 'reality,' confusion with which of 'a smooth passage along resembling ideas' is supposed to constitute the 'fiction,' is already itself the fiction—the fiction of an object which must be other than our feelings, since it is permanent while they are successive, yet so related to them that in virtue of reference to it, instead of being merely different from each other, they become changes of a thing.

With Hume continued existence of perceptions a fiction different from their identity.

306. Having thus in effect imported all three 'fictions of imagination'—identity, continued existence, and existence distinct from perception—into the original 'perception,' Hume, we may think, might have saved himself the trouble of treating them as separate and successive formations. Unless he had so treated them, however, his 'natural history' of consciousness would have been far less imposing than it is. The device, by which he represents the 'vulgar' belief in the reality of the felt thing as a belief that the mere feeling is the real object, enables him also to represent the identity, which a smooth transition along closely resembling sensations leads us to suppose, as still merely identity of a *perception*. 'The very image which is present to the senses is with us the real body; and 'tis to these interrupted images we ascribe a perfect identity.'[1] The identity lying thus in the images or appearances, not in anything to which they are referred, a further fiction seems to be required by which we may overcome the contradiction between the interruption of the appearances and their identity—the fiction of 'a continued being which may fill the intervals' between the appearances.[2] That a 'propension' towards such a fiction would naturally arise from the uneasiness caused by such a contradiction, we may readily admit. The question is how the propension can be satisfied by a supposition which is merely another expression for one of the contradictory beliefs. What difference is there between the appearance of a perception and its existence, that interruption of the perception, though incompatible with uninterruptedness in its appearance, should not be so with uninterruptedness in its existence? It may be answered that there is just the

[1] P. 493. [2] Pp. 494, 495.

difference between relation to a feeling subject and relation to a thinking one—between relation to a consciousness which is in time, or successive, and relation to a thinking subject which, not being itself in time, is the source of that determination by permanent conditions, which is what is meant by the real existence of a perceived thing. But to Hume, who expressly excludes such a subject—with whom 'it exists' = 'it is felt'—such an answer is inadmissible. He can, in fact, only meet the difficulty by supposing the existence of unfelt feelings, of unperceived perceptions. The appearance of a perception is its presence to 'what we call a mind,' which 'is nothing but a heap or collection of different perceptions, united together by certain relations, and supposed, though falsely, to be endowed with a perfect simplicity and identity.' [1] To consider a perception, then, as existing though not appearing is merely to consider it as detached from this 'heap' of other perceptions which, on Hume's principle that whatever is distinguishable is separable, is no more impossible than to distinguish one perception from all others.[2] In fact, however, it is obvious that the supposed detachment is the very opposite of such distinction. A perception distinguished from all others is determined by that distinction in the fullest possible measure. A perception *detached* from all others, left out of the 'heap which we call a mind,' being out of all relation, has no qualities—is simply nothing. We can no more 'consider' it than we can see vacancy. Yet it is by the consideration of such nonentity, by supposing a world of unperceived perceptions, of 'existences' without relation or quality, that the mind, according to Hume—itself only 'a heap of perceptions'—arrives at that fiction of a continued being which, as involved in the supposition of identity, is the condition of our believing in a world of real things at all.

Can perceptions exist when not perceived?

307. It is implied, then, in the process by which, according to Hume, the fiction of a continued being is arrived at, that this being is supposed to be not only continued but 'distinct from the mind' and 'independent' of it. With Hume, however, the supposition of a distinct and 'independent' existence of the *perception* is quite different from that of a distinct and independent object other than the perception. The former is the 'vulgar hypothesis,' and though a fiction,

Existence of objects, distinct from perceptions, a further fiction still.

[1] P. 495. [2] Ibid.

it is also a universal belief: the latter is the 'philosophical hypothesis,' which, if it has a tendency to obtain belief at all, at any rate derives that tendency, in other words 'acquires all its influence over the imagination,' from the vulgar one.[1] Just as the belief in the independent and continued existence of perceptions results from an instinctive effort to escape the uneasiness, caused by the contradiction between the interruption of resembling perceptions and their imagined identity, so the contradiction between this belief and the evident dependence of all perceptions 'on our organs and the disposition of our nerves and animal spirits' leads to the doctrine of representative ideas or 'the double existence of perceptions and objects.' 'This philosophical system, therefore, is the monstrous offspring of two principles which are contrary to each other, which are both at once embraced by the mind and which are unable mutually to destroy each other. The imagination tells us that our resembling perceptions have a continued and uninterrupted existence, and are not annihilated by their absence. Reflection tells us that even our resembling perceptions are interrupted in their existence and different from each other. The contradiction betwixt these opinions we elude by a new fiction which is conformable to the hypotheses both of reflection and fancy, by ascribing these contrary qualities to different existences; the interruption to *perceptions*, and the continuance to *objects*.[2]

Are these several 'fictions' really different from each other?

308. Here, again, we find that the contradictory announcements, which it is the object of this new fiction to elude, are virtually the same as those implied in that judgment of identity which is necessary to the 'perception' of this pen or this paper. That 'interruption of our resembling perceptions,' of which 'reflection' (in the immediate context 'Reason') is here said to 'tell us,' is merely that difference in time, or succession, which Hume everywhere else treats as a datum of sense, and which, as he points out, is as necessary a factor in the idea of identity, as is the imagination of an existence continued throughout the succession. Thus the contradiction, which suggests this philosophical fiction of double existence, has been already present and overcome in every perception of a qualified object. Nor does the fiction itself, by which the contradiction is eluded, differ except verbally from that suggested by the contradiction between

[1] P. 500. [2] P. 502.

the interruption and the identity of perceptions. What power is there in the word 'object' that the supposition of an unperceived existence of perceptions, continued while their appearance is broken, should be an unavoidable fiction of the imagination, while that of 'the double existence of perceptions and objects' is a gratuitous fiction of philosophers, of which 'vulgar' thinking is entirely innocent?

309. That it is gratuitous we may readily admit, but only because a recognition of the function of the Ego in the primary constitution of the qualified individual object—this pen or this paper—renders it superfluous. To the philosophy, however, in which Hume was bred, the perception of a qualified object was simply a feeling. No intellectual synthesis of successive feelings was recognized as involved in it. It was only so far as the dependence of the feeling on our organs, in the absence of any clear distinction between feeling and felt thing, seemed to imply a dependent and broken existence of the thing, that any difficulty arose—a difficulty met by the supposition that the felt thing, whose existence was thus broken and dependent, represented an unfelt and permanent thing of which it is a copy or effect. To the Berkeleian objections, already fatal to this supposition, Hume has his own to add, viz. that we can have no idea of relation in the way of cause and effect except as between objects which we have observed, and therefore can have no idea of it as existing between a perception and an object of which we can only say that it is not a perception. Is all existence then 'broken and dependent'? That is the 'sceptical' conclusion which Hume professes to adopt—subject, however, to the condition of accounting for the contrary supposition (without which, as he has to admit, we could not thinkor speak, and which alone gives a meaning to his own phraseology about impressions and ideas) as a fiction of the imagination. He does this, as we have seen, by tracing a series of contradictions, with corresponding hypotheses invented, either instinctively or upon reflection, in order to escape the uneasiness which they cause, all ultimately due to our mistaking similar successive feelings for an identical object. Of such an object, then, we must have an idea to begin with, and it is an object permanent throughout a variation of time, which means a succession of feelings; in other words, it is a felt thing, as distinct from feelings but to which feelings are referred as

Are they not all involved in the simplest perception?

its qualities. Thus the most primary perception—that in default of which Hume would have no reality to oppose to fiction, nor any point of departure for the supposed construction of fictions—already implies that transformation of feelings into changing relations of a thing which, preventing any incompatibility between the perpetual brokenness of the feeling and the permanence of the thing, 'eludes' by anticipation all the contradictions which, according to Hume, we only 'elude' by speaking as if we had ideas that we have not.

Yet they are not possible ideas, because copied from no impressions.

310. 'Ideas that we *have not*;' for no one of the fictions by which we elude the contradictions, nor indeed any one of the contradictory judgments themselves, can be taken to represent an 'idea' according to Hume's account of ideas. He allows himself indeed to speak of our having ideas of identical objects, such as *this table while I see or touch it*—though in this case, as has been shown, either the object is not identical or the idea of it cannot be copied from an impression—and of our transferring this idea to resembling but interrupted perceptions. But the supposition to which the contradiction involved in this transference gives rise—the supposition that the perception continues to exist when it is not perceived—is shown by the very statement of it to be no possible copy of an impression. Yet according to Hume it is a 'belief,' and a belief is 'a lively idea associated with a present impression.' What then is the impression and what the associated idea? 'As the propensity to feign the continued existence of sensible objects arises from some lively impressions of the memory, it bestows a vivacity on that fiction; or, in other words, makes us believe the continued existence of body.'[1] Well and good: but this only answers the first part of our question. It tells us what are the impressions in the supposed case of belief, but not what is the associated idea to which their liveliness is communicated. To say that it arises from a propensity to feign, strong in proportion to the liveliness of the supposed impressions of memory, does not tell us of what impression it is a copy. Such a propensity indeed would be an 'impression of reflection,' but the fiction itself is neither the propensity nor a copy of it. The only possible supposition left for Hume would be that it is a 'compound idea;' but what combination

[1] P. 496.

of 'perceptions' can amount to the existence of perceptions when they are not perceived?

311. From this long excursion into Hume's doctrine of relation in the way of identity—having found him admitting explicitly that it is only by a 'fiction of the imagination' that we identify this table as now seen with this table as seen an hour ago, and implicitly that the same fiction is involved in the perception of this table as an identical object even when hand or eye is kept upon it, while yet he says not a word to vindicate the possibility of such a fiction for a faculty which can merely reproduce and combine 'perishing impressions'—we return to consider its bearing upon his doctrine of relation in the way of cause and effect. According to him, as we saw,[1] that relation, 'considered as a philosophical' one, is founded on a comparison of present experience with past, in the sense that we regard an object, precedent and contiguous to another, as its cause when all like objects have been found similarly related. The question then arises whether the experiences compared—the present and the past alike—do not involve the fiction of identity along with the whole family of other fictions which Hume affiliates to it? Does the relation of precedence and sequence, which, if constant, amounts to that of cause and effect, merely mean precedence and sequence of two feelings, indefinitely like an indefinite number of other feelings that have thus the one preceded and the other followed; or is it a relation between one qualified thing or definite fact always the same with itself, and another such thing or fact always the same with itself? The question carries its own answer. If in the definition quoted Hume used the phrase 'all like objects' instead of the 'same object,' in order to avoid the appearance of introducing the 'fiction' of identity into the definition of cause, the device does not avail him much. The effect of the 'like' is neutralized by the 'all.' A *uniform* relation is impossible except between objects of which each has a definite identity.

Comparison of present experience with past, which yields relation of cause and effect, presupposes judgment of identity;

312. When Hume has to describe the experience which gives the idea of cause and effect, he virtually admits this. 'The nature of experience,' he tells us, 'is this. We remember to have had frequent instances of the existence of

without which there could be no recognition of an

[1] Above, pars. 298 and 299.

object as one observed before.

one species of objects, and also remember that the individuals of another species of objects have always attended them, and have existed in a regular order of contiguity and succession with regard to them. Thus we remember to have seen that species of object we call *flame*, and to have felt that species of sensation we call *heat*. We likewise call to mind their constant conjunction in all past instances. Without any farther ceremony we call the one cause, and the other effect, and infer the existence of the one from the other.'[1] It appears, then, that upon experiencing certain sensations of sight and touch, we recognize each as 'one of a species of objects' which we remember to have observed in certain constant relations before. In virtue of the recognition the sensations become severally this *flame* and this *heat*; and in virtue of the remembrance the objects thus recognized are held to be related in the way of cause and effect. Now it is clear that though the recognition takes place upon occasion of a feeling, the object recognized—this flame or this heat—is by no means the feeling as a 'perishing existence.' Unless the feeling were taken to represent a thing, conceived as permanently existing under certain relations and attributes—in other words, unless it were *identified* by thought—it would be no definite object, not this *flame* or this *heat*, at all. The moment it is named, it has ceased to be a feeling and become a felt thing, or, in Hume's language, an 'individual of *a species of objects*.' And just as the present 'perception' is the recognition of such an individual, so the remembrance which determines the recognition is one wholly different from the return with lessened liveliness of a feeling more strongly felt before. According to Hume's own statement, it consists in recalling 'frequent instances of the existence of a *species of objects*.' It is remembrance of an experience in which every feeling, that has been attended to, has been interpreted as a fresh appearance of some qualified object that 'exists' throughout its appearances—an experience which for that reason forms a connected whole. If it were not so, there could be no such comparison of the relations in which two objects are now presented with those in which they have always been presented, as that which according to Hume determines us to regard them as cause and effect. The condition of our so

[1] P. 388.

regarding them is that we suppose the objects now presented to be *the same* with those of which we have had previous experience. It is only on supposition that a certain sensation of sight is not merely like a multitude of others, but represents the same object as that which I have previously known as flame, that I infer the sequence of heat and, when it does follow, regard it as an effect. If I thought that the sensation of sight, however like those previously referred to flame, did not represent the same object, I should not infer heat as effect; and conversely, if, having identified the sensation of sight as representative of flame, I found that the inferred heat was not actually felt, I should judge that I was mistaken in the identification. It follows that it is only an experience of identical, and by consequence related and qualified, objects, of which the memory can so determine a sequence of feelings as to constitute it an experience of cause and effect. Thus the perception and remembrance upon which, according to Hume, we judge one object to be the cause of another, alike rest on the 'fictions of identity and continued existence.' Without these no present experience would, in his language, be an instance of an individual of a certain species existing in a certain relation, nor would there be a past experience of individuals of the same species, by comparison with which the constancy of the relation might be ascertained.

Hume makes conceptions of identity and cause each come before the other.

313. Against this derivation of the conception of cause and effect, as implying that of identity, may be urged the fact that when we would ascertain the truth of any identification we do so by reference to causes and effects. As Hume himself puts it at the outset of his discussion of causation, an inference of identity 'beyond the impressions of our senses can be founded only on the connexion of cause and effect.' . . . 'Whenever we discover a perfect resemblance between a new object and one which was formerly present to the senses, we consider whether it be common in that species of objects; whether possibly or probably any cause could operate in producing the change and resemblance; and according as we determine concerning these causes and effects, we form our judgment concerning the identity of the object.'[1] This admission, it may be said, though it tells against Hume's own

[1] P. 376.

subsequent explanation of identity as a fiction of the imagination, is equally inconsistent with any doctrine that would treat identity as the presupposition of inference to cause or effect. Now undoubtedly if the identity of interrupted perceptions is one fiction of the imagination and the relation of cause and effect another, each resulting from 'custom,' to say with Hume, that we must have the idea of cause in order to arrive at the supposition of identity, is logically to exclude any derivation of that idea from an experience which involves the supposition of identity. The 'custom' which generates the idea of cause must have done its work before that which generates the supposition of identity can begin. Hume therefore, after the admission just quoted, was not entitled to treat the inference to cause or effect as a habit derived from experience of identical things. But it is otherwise if the conceptions of causation and identity are correlative—not results of experience of which one must be formed before the other, but co-ordinate expressions of one and the same synthetic principle, which renders experience possible. And this is the real state of the case. It is true, as Hume points out, that when we want to know whether a certain sensation, precisely resembling one that we have previously experienced, represents the same object, we do so by asking how otherwise it can be accounted for. If no difference appears in its antecedents or sequents, we identify it—refer it to the same thing—as that previously experienced; for its relations (which, since it is an event in time, take the form of antecedence and sequence) *are* the thing. The conceptions of identity and of relation in the way of cause and effect are thus as strictly correlative and inseparable as those of the thing and of its relations. Without the conception of identity experience would want a centre, without that of cause and effect it would want a circumference. Without the supposition of objects which 'existing at one time are the same with themselves as existing at other times'—a supposition which at last, when through acquaintance with the endlessness of orderly change we have learnt that there is but one object for which such identity can be claimed without qualification, becomes the conception of nature as a uniform whole—there could be no such comparison of the relations in which an object is now presented with those in which it has been before presented, as determines us to reckon it the cause or

Their true correlativity.

effect of another; but it is equally true that it is only by such comparison of relations that the identity of any particular object can be ascertained.

314. Thus, though we may concede to Hume that neither in the inference to the relation of cause and effect nor in the conclusions we draw from it do we go 'beyond experience,'[1] this will merely be, if his account of it as a 'philosophical relation' be true, because in experience we already go beyond sense. 'There is nothing,' says Hume, 'in any object considered in itself that can afford us a reason for drawing a conclusion beyond it.'[2]—a statement which to him means that, if the mind really passes from it to another, this is only because as a matter of fact another feeling follows on the first. But, in truth, if each feeling were merely 'considered in itself,' the fact that one follows on another would be no fact *for the subject of the feelings*, no starting-point of intelligent experience at all; for the fact is the relation between the feelings—a relation which only exists for a subject that considers neither feeling 'in itself,' as a 'separate and perishing existence,' but finds a reality in the determination of each by the other which, as it is not either or both of them, so survives, while they pass, as a permanent factor of experience. Thus in order that any definite 'object' of experience may exist for us, our feelings must have ceased to be what according to Hume they are in themselves. They cease to be so in virtue of the presence to them of the Ego, in common relation to which they become related to each other as mutually qualified members of a permanent system—a system which at first for the individual consciousness exists only as a forecast or in outline, and is gradually realized and filled up with the accession of experience. It is quite true that nothing more than the reference to such a system, already necessary to constitute the simplest object of experience, is involved in that interpretation of every event as a changed appearance of an unchanging order, and therefore to be accounted for, which we call inference to a cause or the inference of necessary connection; or, again, in the identification of the event, the determination of its particular nature by the discovery of its particular cause.

Hume quite right in saying that we do not go MORE beyond sense in reasoning than in perception.

315. The supposed difference then between immediate and mediate cognition is no absolute difference. It is not a

How his doctrine might have

[1] Above, pars. 285 & 286.

[2] P. 436 and elsewhere.

been developed.

difference between experience and a process that goes beyond experience, or between an experience unregulated by a conception of a permanent system and one that is so regulated. It lies merely in the degree of fullness and articulation which that conception has attained. If this had been what Hume meant to convey in his assimilation of inference to perception, he would have gone far to anticipate the result of the enquiry which Kant started. And this is what he might have come to mean if, instead of playing fast and loose with 'impression' and 'object,' using each as plausibility required on the principle of accommodation to the 'vulgar,' he had faced the consequence of his own implicit admission, that every perception of an object as identical is a 'fiction' in which we go beyond present feeling. As it is, his 'scepticism with regard to the senses' goes far enough to empty their 'reports' of the content which the 'vulgar' ascribe to them, and thus to put a breach between sense and the processes of knowledge, but not far enough to replace the 'sensible thing' by a function of reason. In default of such replacement, there was no way of filling the breach but to bring back the vulgar theory under the cover of habits and 'tendencies to feign,' which all suppose a ready-made knowledge of the sensible thing as their starting-point. Hence the constant contradiction, which it is our thankless task to trace, between his solution of the real world into a succession of feelings and the devices by which he sought to make room in his system for the actual procedure of the physical sciences. Conspicuous among these is his allowance of that view of relation in the way of cause and effect as an objective reality, which is represented by his definition of it as a 'philosophical relation.' It is in the sense represented by that definition that his doctrine has been understood and retained by subsequent formulators of inductive logic; but on examining it in the light of his own statements we have found that the relation, as thus defined, is not that which his theory required, and as which to represent it is the whole motive of his disquisition on the subject. It is not a sequence of impression upon impression, distinguished merely by its constancy; nor a sequence of idea upon impression, distinguished merely by that transfer of liveliness to the idea which arises from the constancy of its sequence upon the impression. It is a relation between 'objects' of which each

Its actual outcome.

is what it is only as 'an instance of a species' that exists continuously, and therefore in distinction from our 'perishing impressions,' according to a regular order of 'contiguity and succession.' As such existence and order are by Hume's own showing no possible impressions, and by consequence no possible ideas, so neither are the 'objects' which derive their whole character from them.

No philosophical relation admissible with Hume that is not derived from a natural one.

316. It may be said, however, that wherever Hume admits a definition purporting to be of a 'philosophical relation,' he does so only as an accommodation, and under warning that every such relation is 'fictitious' except so far as it is equivalent to a natural one; that according to his express statement 'it is only so far as causation is a *natural* relation, and produces an union among our ideas, that we are able to reason upon it or draw any inference from it;'[1] and that therefore it is only by his definition of it as a 'natural relation' that he is to be judged. Such a vindication of Hume would be more true than effective. That with him the 'philosophical' relation of cause and effect is 'fictitious,' with all the fictitiousness of a 'continued existence distinct from perceptions,' is what it has been the object of the preceding paragraphs to show. But the fictitiousness of a relation can with him mean nothing else than that, instead of having an idea of it, we have only a 'tendency to suppose' that we have such an idea. Thus the designation of the philosophical relation of cause and effect carries with it two conditions, one negative, the other positive, on the observance of which the logical value of the designation depends. The 'tendency to suppose' must *not* after all be itself translated into the idea which it is to replace; and it *must* be accounted for as derived from a 'natural relation' which is not fictitious. That the negative condition is violated by Hume, we have sufficiently seen. He treats the 'philosophical relation' of cause and effect, in spite of the 'fictions' which it involves, not as a name for a tendency to suppose that we have an idea which we have not, but as itself a definite idea on which he founds various 'rules for judging what objects are really so related and what are not.'[2] That the positive condition is violated also—that the 'natural relation' of cause and effect, according to the sense in which his definition of it is meant to be understood, already itself involves 'fic-

[1] P. 394. [2] Part III. § 15.

tions,' and only for that reason is a possible source of the 'philosophical'—is what we have next to show.

Examination of his account of cause and effect as 'natural relation.'

317. That definition, it will be remembered, runs as follows: 'A cause is an object precedent and contiguous to another, and so united with it in the imagination that the idea of the one determines the mind to form the idea of the other, and the impression of the one to form a more lively idea of the other.' Now, as has been sufficiently shown, the object of an idea with Hume can properly mean nothing but the impression from which the idea is derived, which again is only the livelier idea, even as the idea is the fainter impression. The idea and the object of it, then, only differ as different stages in the vivacity of a feeling.[1] It must be remembered, further, in regard to the 'determination of the mind' spoken of in the definition, that the 'mind' according to Hume is merely a succession of impressions and ideas, and that its 'determination' means no more than a certain habitualness in this succession. Deprived of the benefit of ambiguous phraseology, then, the definition would run thus: 'A cause is a lively feeling immediately precedent to another,[2] and so united with it that when either of the two more faintly recurs, the other follows with like faintness, and when either occurs with the maximum of liveliness the other follows with less, but still great, liveliness.' Thus stated, the definition would correspond well enough to the process by which Hume arrives at it, of which the whole drift, as we have seen, is to merge the so-called objective relation of cause and effect, with the so-called inference from it, in the mere habitual transition from one feeling to another. But it is only because not thus stated, and because the actual statement is understood to carry a meaning of which Hume's doctrine does not consistently admit, that it has a chance of finding acceptance. Its plausibility depends on 'object' and 'mind' and 'determination' being understood precisely in the sense in which, according to Hume, they ought not to be understood, so that it shall express not a sequence of feeling

[1] See above, paragraphs 195 and 208. Cf. also, among other passages, one in the chapter now under consideration (p. 451)—'Ideas always represent their *objects or impressions*.'

[2] The phrase 'immediately precedent' would seem to convey Hume's meaning better than his own phrase 'precedent and contiguous.' Contiguity *in space* (which is what we naturally understand by 'contiguity,' when used absolutely) he could not have deliberately taken to be necessary to constitute the relation of cause and effect, since the impressions so related, as he elsewhere shows, may often not be in space at all.

upon feeling, as this might be for a merely feeling subject, but that permanent relation or law of nature which to a subject that thinks upon its feelings, and only to such a subject, their sequence constitutes or on which it depends.

Double meaning of natural relation. How Hume turns it to account.

318. It is this essential distinction between the sequence of feeling upon feeling for a sentient subject and the relation which to a thinking subject this sequence constitutes—a distinction not less essential than that between the conditions, through which a man passes in sleep, as they are for the sleeping subject himself, and as they are for another thinking upon them—which it is the characteristic of Hume's doctrine of natural relation in all its forms to disguise. Only in virtue of the presence to feelings of a subject, which distinguishes itself from them, do they become related objects. Thus, with Hume's exclusion of such a subject, with his reduction of mind and world alike to the succession of feelings, relations and ideas of relation logically disappear. But by help of the phrase 'natural relation,' covering, as it does, two wholly different things—the involuntary sequence of one feeling upon another, and that determination of each by the other which can only take place for a synthetic self-consciousness—he is able on the one hand to deny that the relations which form the framework of knowledge are more than sequences of feeling, and on the other to clothe them with so much of the real character of relations as qualifies them for 'principles of union among ideas.' Thus the mere occurrence of similar feelings is with him already that relation in the way of resemblance, which in truth only exists for a subject that can contemplate them as permanent objects. In like manner the succession of feelings, which can only constitute time for a subject that contrasts the succession with its own unity, and which, if ideas were feelings, would exclude the possibility of an idea of time, is yet with him indifferently time and the idea of time, though ideas are feelings and there is no 'mind' but their succession.

If an effect is merely a constantly observed sequence, how can an event be an effect the first time

319. The fallacy of Hume's doctrine of causation is merely an aggravated form of that which has generally passed muster in his doctrine of time. If time, because a relation between feelings, can be supposed to survive the exclusion of a thinking self and the reduction of the world and mind to a succession of feelings, the relation of cause and effect has only to be assimilated to that of time in order that its in-

it is observed?

compatibility with the desired reduction may disappear. The great obstacle to such assimilation lies in that opposition to the mere sequence of feelings which causation as 'matter of fact'—as that in discovering which we 'discover the real existence and relations of objects'—purports to carry with it. Why do we set aside our usual experience as delusive in contrast with the exceptional experience of the laboratory—why do we decide that an event which has seemed to happen cannot really have happened, because under the given conditions no adequate cause of it could have been operative—if the relation of cause and effect is itself merely a succession of seemings, repeated so often as to leave behind it a lively expectation of its recurrence? This question, once fairly put, cannot be answered: it can only be evaded. It is Hume's method of evasion that we have now more particularly to notice.

Hume evades this question;

320. In its detailed statement it is very different from the method adopted in those modern treatises of Logic which, beginning with the doctrine that facts are merely feelings in the constitution of which thought has no share, still contrive to make free use in their logical canon of the antithesis between the real and apparent. The key to this modern method is to be found in its ambiguous use of the term 'phenomenon,' alike for the feeling as it is felt, 'perishing' when it ceases to be felt, and for the feeling as it is for a thinking subject—a qualifying and qualified element in a permanent world. Only if facts were 'phenomena' in the former sense would the antithesis between facts and conceptions be valid; only if 'phenomena' are understood in the latter sense can causation be said to be a law of phenomena. So strong, however, is the charm which this ambiguous term has exercised, that to the ordinary modern logician the question above put may probably seem unmeaning. 'The appearance,' he will say, 'which we set aside as delusive does not consist in any of the reports of the senses—these are always true—but in some false supposition in regard to them due to an insufficient analysis of experience, in some reference of an actual sensation to a group of supposed possibilities of sensation, called a "thing," which are either unreal or with which it is not really connected. The correction of the false appearance by a discovery of causation is the replacement of a false supposition, as to the possibility of the antecedence or sequence

Still, he is a long way off the Inductive Logic, which supposes an objective sequence.

of one feeling to another, by the discovery, through analysis of experience, of what feelings do actually precede and follow each other. It implies no transition from feelings to things, but only from a supposed sequence of feelings to the actual one. Science in its farthest range leaves us among appearances still. It only teaches us what really appears.'

Can the principle of uniformity of nature be derived from sequences of feelings?

321. Now the presupposition of this answer is the existence of just that necessary connexion as between appearances, just that objective order, for which, because it is not a possible 'impression or idea,' Hume has to substitute a blind propensity produced by habit. Those who make it, indeed, would repel the imputation of believing in any 'necessary connexion,' which to them represents that 'mysterious tie' in which they vaguely suppose 'metaphysicians' to believe. They would say that necessary connexion is no more than uniformity of sequence. But sequence of what? Not of feelings as the individual feels them, for then there would be no perfect uniformities, but only various degrees of approximation to uniformity, and the measure of approximation in each case would be the amount of the individual's experience in that particular direction. The procedure of the inductive logician shows that his belief in the uniformity of a sequence is irrespective of the number of instances in which it has been experienced. A single instance in which one feeling is felt after another, if it satisfy the requirements of the 'method of difference,' *i.e.* if it show exactly what it is that precedes and what it is that follows in that instance, suffices to establish a uniformity of sequence, on the principle that what is fact once is fact always. Now a uniformity that can be thus established is in the proper sense necessary. Its existence is not contingent on its being felt by anyone or everyone. It does not come into being with the experiment that shows it. It is felt because it is real, not real because it is felt. It may be objected indeed that the principle of the 'uniformity of nature,' the principle that what is fact once is fact always, itself gradually results from the observation of facts which are feelings, and that thus the principle which enables us to dispense with the repetition of a sensible experience is itself due to such repetition. The answer is, that feelings which are conceived as facts are already conceived as constituents of a nature. The same presence of the thinking subject to, and distinction of itself from, the feelings, which renders them

knowable *facts*, renders them members of a world which is one throughout its changes. In other words, the presence of facts from which the uniformity of nature, as an abstract rule, is to be inferred, is already the consciousness of that uniformity *in concreto*.

With Hume the only uniformity is in expectation, as determined by habit; but strength of such expectation must vary indefinitely.

322. Hume himself makes a much more thorough attempt to avoid that pre-determination of feelings by the conception of a world, of things and relations, which is implied in the view of them as permanent facts. He will not, if he can help it, so openly depart from the original doctrine that thought is merely weaker sense. Such conceptions as those of the uniformity of nature and of reality, being no possible 'impressions or ideas,' he only professes to admit in a character wholly different from that in which they actually govern inductive philosophy. Just as by reality he understands not something to which liveliness of feeling may be an index, but simply that liveliness itself, and by an inferred or believed reality a feeling to which this liveliness has been communicated from one that already has it; so he is careful to tell us 'that the supposition that the future resembles the past is derived entirely from habit, by which we are determined to expect for the future the same train of objects to which we have been accustomed.'[1] The supposition then *is* this 'determination,' this 'propensity,' to expect. Any 'idea' derived from the propensity can only be the propensity itself at a fainter stage; and between such a propensity and the conception of 'nature,' whether as uniform or otherwise, there is a difference which only the most hasty reader can be liable to ignore. But if by any confusion an expectation of future feelings, determined by the remembrance of past feelings, could be made equivalent to any conception of nature, it would not be of nature as uniform. As is the 'habit' which determines the expectation, such must be the expectation itself; and as have been the sequences of feeling in each man's past, such must be the habit which results from them. Now no one's feelings have always occurred to him in the same relative order. There may be some pairs of feelings of which one has always been felt before the other and never after it, and between which there has never been an intervention of a third—although (to take Hume's favourite instance) even the feeling of heat

[1] P. 431.

may sometimes precede the sight of the flame—and in these cases upon occurrence of one there will be nothing to qualify the expectation of the other. But just so far as there are exceptions in our past experience to the immediate sequence of one feeling upon another, must there be a qualification of our expectation of the future, if it be undetermined by extraneous conceptions, with reference to those particular feelings.

It could not serve the same purpose as the conception of uniformity of nature.

323. Thus the expectation that 'the future will resemble the past,' if the past means to each man (and Hume could not allow of its meaning more) merely the succession of his own feelings, must be made up of a multitude of different expectations—some few of these being of that absolute and unqualified sort which alone, it would seem, can regulate the transition that we are pleased to call 'necessary connexion;' the rest as various in their strength and liveliness as there are possible differences between cases where the chances are evenly balanced and where they are all on one side. From Hume's point of view, as he himself says, 'every past experiment,' *i.e.* every instance in which feeling (*a*) has been found to follow feeling (*b*), 'may be considered a kind of chance.'[1] As are the instances of this kind to the instances in which some other feeling has followed (*b*), such are the chances or 'probability' that (*a*) will follow (*b*) again, and such upon the occurrence of (*b*) will be that liveliness in the expectation of (*a*), which alone with Hume is the reality of the connexion between them. In such an expectation, in an expectation made up of such expectations, there would be nothing to serve the purpose which the conception of the uniformity of nature actually serves in inductive science. It could never make us believe that a feeling felt after another—as when the motion of a bell is seen after the sound of it has been heard—represents the real antecedent. It could never set us upon that analysis of our experience by which we seek to get beyond sequences that are merely usual, and admit of indefinite exceptions, to such as are invariable; upon that 'interrogation of nature' by which, on the faith that there is a uniformity if only we could find it out, we wrest from her that confession of a law which she does not spontaneously offer. The fact that some sequences of feeling have been so uniform as

[1] P. 433.

to result in unqualified expectations (if it be so) could of itself afford no motive for trying to compass other expectations of a like character which do not naturally present themselves. Nor could there be anything in the appearance of an exception to a sequence, hitherto found uniform, to lead us to change our previous expectation for one which shall not be liable to such modification. The previous expectation would be so far weakened, but there is nothing in the mere weakening of our expectations that should lead to the effort to place them beyond the possibility of being weakened. Much less could the bundle of expectations come to conceive themselves as one system so as that, through the interpretation of each exception to a supposed uniformity of sequence as an instance of a real one, the changes of the parts should prove the unchangeableness of the whole.

Hume changes the meaning of this expectation by his account of the 'remembrance' which determines it.

Bearing of his doctrine of necessary connexion upon his argument against miracles.

324. That a doctrine which reduces the order of nature to strength of expectation, and exactly reverses the positions severally given to belief and reality in the actual procedure of science,[1] should have been ostensibly adopted by scientific men as their own—with every allowance for Hume's literary skill and

[1] It is by a curious fate that Hume should have been remembered, at any rate in the 'religious' world, chiefly by the argument against miracles which appears in the 'Essays'—an argument which, however irrefragable in itself, turns wholly upon that conception of nature as other than our instinctive expectations and imaginations, which has no proper place in his system (see Vol. IV. note *u*). If 'necessary connexion' were really no more than the transition of imagination, as determined by constant association, from an idea to its usual attendant—if there were no conception of an objective order to determine belief other than the belief itself—the fact that such an event, as the revival of one four-days-dead at the command of a person, had been believed, since it would show that the imagination was at liberty to pass from the idea of the revival to that of the command (or *vice versa*) with that liveliness which constitutes reality, would show also that no necessary connexion, no law of nature in the only sense in which Hume entitles himself to speak of such, was violated by the sequence of the revival on the command. At the same time there would be nothing 'miraculous,' according to his definition of the miraculous as distinct from the extraordinary, in the case. Taken strictly, indeed, his doctrine implies that a belief in a miracle is a contradiction in terms. An event is not regarded as miraculous unless it is regarded as a 'transgression of a law of nature by a particular volition of the Deity or by the interposition of some invisible agent' (Ibid. note x.); but it could not transgress a law of nature in Hume's sense unless it were so inconsistent with the habitual association of ideas as that it could not be believed. Hume's only consistent way of attacking miracles, then, would have been to show that the events in question, as *miraculous*, had never been believed. Having been obliged to recognize the belief in their having happened, he is open to the retort 'ad hominem' that according to his own showing the belief in the events constitutes their reality. Such a retort, however, would be of no avail in the theological interest, which requires not merely that the events should have happened but that they should have been *miraculous*, *i. e.* 'transgressions of a law of nature by a particular volition of the Deity.'

for the charm which the prospect of overcoming the separation between reason and instinct exercises over naturalists—would have been unaccountable if the doctrine had been thus nakedly put or consistently maintained. But it was not so. Hume's sense of consistency was satisfied when expectation determined by remembrance had been put in the place of necessary connexion, as the basis of 'inference to matters of fact.' It does not lead him to adjust his view of the fact inferred to his view of the basis on which the inference rests. Expectation is an 'impression of reflection,' and if the relation of cause and effect is no more than expectation, that which seemed most strongly to resist reduction to feeling has yet been so reduced. But if the expectation is to be no more than an impression of reflection, the object expected must itself be no more than an impression of some kind or other. The expectation must be expectation of a feeling, pure and simple. Nor does Hume in so many words allow that it is otherwise, but meanwhile though the expectation itself is not openly tampered with, the remembrance that determines it is so. This is being taken to be that, which it cannot be unless ideas unborrowed from impressions are operative in and upon it. It is being regarded, not as the recurrence of a multitude of feelings with a liveliness indefinitely less than that in virtue of which they are called impressions of sense, and indefinitely greater than that in virtue of which they are called ideas of imagination, but as the recognition of a world of experience, one, real and abiding. An expectation determined by such remembrance is governed by the same 'fictions' of identity and continued existence which are the formative conditions of the remembrance. Expectation and remembrance, in fact, are one and the same intellectual act, one and the same reference of feelings, given in time, to an order that is not in time, distinguished according to the two faces which, its 'matter' being in time, it has to present severally to past and future. The remembrance is the measure of the expectation, but as the remembrance carries with it the notion of a world whose existence does not depend on its being remembered, and whose laws do not vary according to the regularity or looseness with which our ideas are associated, so too does the expectation, and only as so doing becomes the mover and regulator of 'inference from the known to the unknown.'

This remembrance, as he describes it, supposes conception of a system of nature.

325. In the passage already quoted, where Hume is speak-

ing of the expectation in question as depending simply on habit, he yet speaks of it as an expectation 'of the *same train of objects* to which we have been accustomed.' These words in effect imply that it is *not* habit, as constituted simply by the repetition of separate sequences of feelings, that governs the expectation—in which case, as we have seen, the expectation would be made up of expectations as many and as various in strength as have been the sequences and their several degrees of regularity—but, if habit in any sense, habit as itself governed by conceptions of 'identity and distinct continued existence,' in virtue of which, as past experience is not an indefinite series of perishing impressions of separate men but represents one world, so all fresh experience becomes part 'of the same train of objects;' part of a system of which, as a whole, 'the change lies only in the time.'[1] If now we look back to the account given of the relation of memory to belief we shall find that it is just so far as, without distinct avowal, and in violation of his principles, he makes 'impressions of memory' carry with them the conception of a real system, other than the consciousness of their own liveliness, that he gains a meaning for belief which makes it in any respect equivalent to the judgment, based on inference, of actual science.

This explains his occasional inconsistent ascription of an objective character to causation.

326. Any one who has carefully read the chapters on inference and belief will have found himself frequently doubting whether he has caught the author's meaning correctly. A clear line of thought may be traced throughout, as we have already tried to trace it[2]—one perfectly consistent with itself and leading properly to the conclusion that 'all reasonings are nothing but the effect of custom, and that custom has no influence but by enlivening the imagination'[3] —but its even tenour is disturbed by the exigency of showing that proven fact, after turning out to be no more than enlivened imagination, is still what common sense and physical science take it to be. According to the consistent theory, ideas of memory are needed for inference to cause or effect, simply because they are lively. Such inference is inference to a 'real existence,' that is to an 'idea assented to,' that is to a feeling having such liveliness as, not being itself one of sense or memory, it can only derive from one of

[1] P. 492. [2] Above, paragraphs 289 and ff. [3] P. 445.

sense or memory through association with it. That the inferred idea is a cause or effect and, as such, has 'real existence,' merely means that it has this derived liveliness or is believed; just as the reality ascribed to the impression of memory lies merely in its having this abundant liveliness from which to communicate to its 'usual attendant.' But while the title of an idea to be reckoned a cause or effect is thus made to depend on its having the derived liveliness which constitutes belief,[1] on the other hand we find Hume from time to time making belief depend on causation, as on a relation of objects distinct from the lively suggestion of one by the others. 'Belief arises only from causation, and we can draw no inference from one object to another except they be connected by this relation.' 'The relation of cause and effect is requisite to persuade us of any real existence.'[2] In the context of these disturbing admissions we find a reconsideration of the doctrine of memory which explains them, but only throws back on that doctrine the inconsistency which they exhibit in the doctrine of belief.

Reality of remembered 'system' transferred to 'system of judgment.

327. This reconsideration arises out of an objection to his doctrine which Hume anticipates, to the effect that since, according to it, belief is a lively idea associated 'to a present impression,' any suggestion of an idea by a resembling or contiguous impression should constitute belief. How is it then that 'belief arises only from causation'? His answer, which must be quoted at length, is as follows :—'"Tis evident that whatever is present to the memory, striking upon the mind with a vivacity which resembles an immediate impression, must become of considerable moment in all the operations of the mind and must easily distinguish itself above the mere fictions of the imagination. Of these impressions or ideas of the memory we form a kind of system, comprehending whatever we remember to have been present either to our internal perception or senses, and every particular of that system, joined to the present impressions, we are pleased to call a *reality*. But the mind stops not here.

[1] It may be as well here to point out the inconsistency in Hume's use of 'belief.' At the end of sec. 5 (Part III.) the term is extended to 'impressions of the senses and memory.' We are said to believe when 'we feel an *immediate impression* of the senses, or a repetition of that impression in the memory. But in the following section the characteristic of belief is placed in the *derived* liveliness of an *idea* as distinct from the immediate liveliness of an impression.

[2] Pp. 407 & 409.

For finding that with this system of perceptions there is another connected by custom or, if you will, by the relation of cause and effect, it proceeds to the consideration of their ideas; and as it feels that 'tis in a manner necessarily determined to view these particular ideas, and that the custom or relation by which it is determined admits not of the least change, it forms them into a new system, which it likewise dignifies with the title of *realities*. The first of these systems is the object of the memory and senses; the second of the judgment. 'Tis this latter principle which peoples the world, and brings us acquainted which such existences as, by their removal in time and place, lie beyond the reach of the senses and memory.'[1]

Reality of the former 'system' other than vivacity of impressions.

328. From this it appears that 'what we are pleased to call reality' belongs, not merely to a 'present impression,' but to 'every particular of a system joined to the present impression' and 'comprehending whatever we remember to have been present either to our internal perception or senses.' This admission already amounts to an abandonment of the doctrine that reality consists in liveliness of feeling. It cannot be that every particular of the system comprehending all remembered facts, which is joined with the present impression, can have the vivacity of that impression either along with it or by successive communication. We can only feel one thing at a time, and by the time the vivacity had spread far from the present impression along the particulars of the system, it must have declined from that indefinite degree which marks an impression of sense. It is not, then, the derivation of vivacity from the present impression, to which it is joined, that renders the 'remembered system' real; and what other vivacity can it be? It may be said indeed that each particular of the system had once the required vivacity, was once a present impression; but if in ceasing to be so, it did not cease to be real—if, on the contrary, it could not become a 'particular of the system,' counted real, without becoming other than the 'perishing existence' which an impression is—it is clear that there is a reality which lively feeling does not constitute and which involves the 'fiction' of an existence continued in the absence, not only of lively feeling, but of all feelings whatsoever. So soon, in short,

[1] P. 408.

as reality is ascribed to a system, which cannot be an 'impression' and of which consequently there cannot be an 'idea,' the first principle of Hume's speculation is abandoned. The truth is implicitly recognized that the reality of an individual object consists in that system of its relations which only exists for a conceiving, as distinct from a feeling, subject, even as the unreal has no meaning except as a confused or inadequate conception of such relations; and that thus the 'present impression' is neither real nor unreal in itself, but may be equally one or the other according as the relations, under which it is conceived by the subject of it, correspond to those by which it is determined for a perfect intelligence.[1]

It is constituted by relations, which are not impressions at all; and in this lies explanation of the inference from it to 'system of judgment.'

329. A clear recognition of this truth can alone explain the nature of belief as a result of inference from the known to the unknown, which is, at the same time, inference to a matter of fact. The popular notion, of course, is that certain facts are given by feeling without inference and then other facts inferred from them. But what is 'fact' taken to mean? If a feeling, then an inferred fact is a contradiction, for it is an unfelt feeling. If (as should be the case) it is taken to mean the relation of a feeling to something, then it already involves inference—the interpretation of the feeling by means of the conception of a universal, self or world, brought to it—an inference which is all inference *in posse*, for it implies that a universe of relations is there, which I must know if I would know the full reality of the individual object: so that no fact can be even partially known without compelling an inference to the unknown, nor can there be any inference to the unknown without modification of what already purports to be known. Hume, trying to carry out the equivalence of fact and feeling, and having clearer sight than his masters, finds himself in the presence of this difficulty about inference. Unless the inferred object is other than one of sense (outer or inner) or of memory, there is no reasoning, but only perception;[2] but if it is other, how can it be real or even an object of consciousness at all, since consciousness is only of impressions, stronger or fainter? The only consistent way out of the difficulty, as we have seen, is to explain inference as the expectation of the recur-

[1] See above, paragraphs 184 & 183. [2] Pp. 376 & 388.

rence of a feeling felt before, through which the unknown becomes known merely in the sense that from the repetition of the recurrence the expectation has come to amount to the fullest assurance. But according to this explanation the difference between the inferences of the savage and those of the man of science will lie, not in the objects inferred, but in the strength of the expectation that constitutes the inference. Meanwhile, if a semblance of explanation has been given for the inference from cause to effect, that from effect to cause remains quite in the dark. How can there be inference from a given feeling to that felt immediately before it?

Not seeing this, Hume has to explain inference to latter system as something forced upon us by habit.

330. From the avowal of such paradoxical results, Hume only saved himself by reverting, as in the passage before us, to the popular view—to the distinction between two 'systems of reality,' one perceived, the other inferred; one 'the object of the senses and memory,' the other 'of the judgment.' He sees that if the educated man erased from his knowledge of the world all 'facts' but those for which he has 'the evidence of his senses and memory,' his world would be unpeopled; but he has not the key to the true identity between the two systems. Not recognizing the inference already involved in a fact of sense or memory, he does not see that it is only a further articulation of this inference which gives the fact of judgment; that as the simplest fact for which we have the 'evidence of sense' is already not a feeling but an explanation of a feeling, which connects it by relations, that are not feelings, with an unfelt universe, so inferred causes and effects are explanations of these explanations, by which they are connected as mutually determinant in the one world whose presence the simplest fact, the most primary explanation of feeling, supposes no less than the most complete. Not seeing this, what is he to make of the system of merely inferred realities? He will represent the relation of cause and effect, which connects it with the 'system of memory,' as a habit derived from the constant *de facto* sequence of this or that 'inferred' upon this or that remembered idea. The mind, 'feeling' the unchangeableness of this habit, regards the idea, which in virtue of it follows upon the impression of memory, as equally real with that impression. In this he finds an answer to the two questions which he himself raises: (*a*) 'Why is it that we draw no

inference from one object to another, except they be connected by the relation of cause and effect;' or (which is the same, since inference to an object implies the ascription of reality to it), 'Why is this relation requisite to persuade us of any real existence?' and (*b*), 'How is it that the relations of resemblance and contiguity have not the same effect?' The answer to the first is, that we do not ascribe reality to an idea recalled by an impression, unless we find that, owing to its customary sequence upon the impression, we cannot help passing from the one to the other. The answer to the second corresponds. The contiguity of an idea to an impression, if it has been repeated often enough and without any 'arbitrary' action on our part, is the relation of cause and effect, and thus does 'persuade us of real existence.' A 'feigned' contiguity, on the other hand, because we are conscious that it is 'of our mere good-will and pleasure' that we give the idea that relation to the impression, can produce no belief. 'There is no reason why, upon the return of the same impression, we should be determined to place the same object in the same relation to it.'[1] In like manner we must suppose (though this is not so clearly stated) that when an impression—such as the sight of a picture—calls up a resembling idea (that of the man depicted) with much vivacity, it does not 'persuade us of his real existence' because we are conscious that it is by the 'mere good-will and pleasure' of some one that the likeness has been produced.

But if so, 'system of judgment' must consist of feelings constantly experienced;

331. Now this account has the fault of being inconsistent with Hume's primary doctrine, inasmuch as it makes the real an object of thought in distinction from feeling, without the merit of explaining the extension of knowledge beyond the objects of sense and memory. It turns upon a conception of the real, as the unchangeable, which the succession of feelings, in endless variety, neither is nor could suggest. It implies that not in themselves, but as representing such an unchangeable, are the feelings which 'return on us whether we will or no,' regarded as real. The peculiar sequence of one idea on another, which is supposed to constitute the relation of cause and effect, is not, according to this description of it, a sequence of feelings simply; it is a

[1] P. 409.

sequence reflected on, found to be unchangeable, and thus to entitle the sequent idea to the prerogative of reality previously awarded (but only by the admission as real of the 'fiction' of distinct continued existence) to the system of memory. But while the identification of the real with feeling is thus in effect abandoned, in saving the appearance of retaining it, Hume makes his explanation of the 'system of judgment' futile for its purpose. He saves the appearance by intimating that the relation of cause and effect, by which the inferred idea is connected with the idea of memory and derives reality from it, is only the repeated sequence of the one idea upon the other, of the less lively feelings upon the more lively, or a habit that results from such repetition. But if the sequence of the inferred idea upon the other must have been so often repeated in order to the existence of the relation which renders the inference possible, the inferred idea can be no new one, but must itself be an idea of memory, and the question, how any one's knowledge comes to extend beyond the range of his memory, remains unanswered.

which only differ from remembered feelings inasmuch as their liveliness has faded.

But how can it have faded, if they have been constantly repeated?

332. What Hume himself seems to mean us to understand is, that the inferred idea is one of imagination, as distinct from memory; and that the characteristic of the relation of cause and effect is that through it ideas of imagination acquire the reality that would otherwise be confined to impressions of sense and memory. But, according to him, ideas of imagination only differ from those of memory in respect of their less liveliness, and of the freedom with which we can combine ideas in imagination that have not been given together as impressions.[1] Now the latter difference is in this case out of the question. A compound idea of imagination, in which simple ideas are put together that have never been felt together, can clearly never be connected with an impression of sense or memory by a relation derived from constant experience of the sequence of one upon the other, and specially opposed to the creations of 'caprice.'[2] We are left, then, to the supposition that the inferred idea, as idea of imagination, is one originally given as an impression of sense, but of which the liveliness has faded and requires to be revived by association in the way of cause and effect with one that has retained the liveliness proper to an

[1] Part I., sec. 3; cf. note on p. 416.

[2] P. 409.

idea of memory. Then the question recurs, how the restoration of its liveliness by association with an impression, on which it must have been constantly sequent in order that the association may be possible, is compatible with the fact that its liveliness has faded. And however this question may be dealt with, if the relation of cause and effect is merely custom, the extension of knowledge by means of it remains unaccounted for; the breach between the expectation of the recurrence of familiar feelings and inductive science remains unfilled; Locke's 'suspicion' that 'a science of nature is impossible,' instead of being overcome, is elaborated into a system.

Inference then can give no new knowledge.

333. Thus inference, according to Hume's account of it as originating in habit, suffers from a weakness quite as fatal as that which he supposes to attach to it if accounted for as the work of reason. 'The work of reason' to a follower of Locke meant either the mediate perception of likeness between ideas, which the discovery of cause or effect cannot be; or else syllogism, of which Locke had shown once for all that it could yield no 'instructive propositions.' But if an idea arrived at by that process could be neither new nor real—not new, because we must have been familiar with it before we put it into the compound idea from which we 'deduce' it; not real, because it has not the liveliness either of sensation or of memory—the idea inferred according to Hume's process, however real with the reality of liveliness, is certainly not new. 'If this means' (the modern logician may perhaps reply), 'that according to Hume no new phenomenon can be given by inference, he was quite right in thinking so. If the object of inference were a separate phenomenon, it would be quite true that it must have been repeatedly perceived before it could be inferred, and that thus inference would be nugatory. But inference is in fact not to such an object, but to a uniform relation of certain phenomena in the way of co-existence and sequence; and what Hume may be presumed to mean is not that every such relation must have been perceived before it can be inferred, much less that it must have been perceived so constantly that an appearance of the one phenomenon causes instinctive expectation of the other, but (*a*) that the phenomena themselves must have been given by immediate perception, and (*b*) that the conception of a law

of causation, in virtue of which a uniformity of relation between them is inferred from a single instance of it, is itself the result of an "inductio per enumerationem simplicem," of the accumulated experience of generations that the same sequents follow the same antecedents.'

Nor does this merely mean that it cannot constitute new phenomena, while it can prove relations, previously unknown, between phenomena.

334. At the point which our discussion has reached, few words should be wanted to show that thus to interpret Hume is to read into him an essentially alien theory, which has doubtless grown out of his, but only by a process of adaptation which it needs a principle the opposite of his to justify. Hume, according to his own profession, knows of no objects but impressions and ideas—feelings stronger or more faint—of no reality which it needs thought, as distinct from feeling, to constitute. But a uniform relation between phenomena is neither impression nor idea, and can only exist for thought. He could not therefore admit inference to such relation as to a real existence, without a double contradiction, nor does he ever explicitly do so. He never allows that inference is other than a transition to a certain sort of feeling, or that it is other than the work of imagination, the weakened sense, as enlivened by custom to a degree that puts it *almost* on a level with sense; which implies that in every case of inference the inferred object is *not* a uniform relation—for how can there be an image of uniform relation?—and that it *is* something which has been repeatedly and without exception perceived to follow another before it can be inferred. Even when in violation of his principle he has admitted a 'system of memory'—a system of things which have been felt, but which are not feelings, stronger or fainter, and which are what they are only through relation—he still in effect, as we have seen, makes the 'system of judgment,' which he speaks of as inferred from it, only the double of it. To suppose that, on the strength of a general inference, itself the result of habit, in regard to the uniformity of nature, particular inferences may be made which shall be other than repetitions of a sequence already habitually repeated, is, if there can be degrees of contradiction, even more incompatible with Hume's principles than to suppose such inferences without it. If a uniformity of relation between particular phenomena is neither impression nor idea, even less so is the system of all relations.

Such a distinction inadmissible with Hume.

His distinction of probability of causes from that of chances might seem to imply conception of nature, as determining inference.

335. There is language, however, in the chapters on 'Probability of Chances and of Causes,' which at first sight might seem to warrant the ascription of such a supposition to Hume. According to the distinction which he inherited from Locke all inference to or from causes or effects, since it does not consist in any comparison of the related ideas, should be merely probable. And as such he often speaks of it. His originality lies in his effort to explain what Locke had named; in his treating that 'something not joined on both sides to, and so not showing the agreement or disagreement of, the ideas under consideration' which yet 'makes me believe,'[1] definitely as Habit. But 'in common discourse,' as he remarks, 'we readily affirm that many arguments from causation exceed probability;'[2] the explanation being that in these cases the habit which determines the transition from impression to idea is 'full and perfect.' There has been enough past experience of the immediate sequence of the one 'perception' on the other to form the habit, and there has been no exception to it. In these cases the 'assurance,' though distinct from knowledge, may be fitly styled 'proof,' the term 'probability' being confined to those in which the assurance is not complete. Hume thus comes to use 'probability' as equivalent to incompleteness of assurance, and in this sense speaks of it as 'derived either from imperfect experience, or from contrary causes, or from analogy.'[3] It is derived from analogy when the present impression, which is needed to give vivacity to the 'related idea,' is not perfectly like the impressions with which the idea has been previously found united; 'from contrary causes,' when there have been exceptions to the immediate sequence or antecedence of the one perception to the other; 'from imperfect experience' when, though there have been no exceptions, there has not been enough experience of the sequence to form a 'full and perfect habit of transition.' Of this last 'species of probability,' Hume says that it is a kind which, 'though it naturally takes place before any entire proof can exist, yet no one who is arrived at the age of maturity can any longer be acquainted with. 'Tis true, nothing is more common than for people of the most advanced knowledge to have attained only an imperfect experience of many

[1] Locke, 4, 15, 3. [2] P. 423. [3] P. 439.

particular events; which naturally produces only an imperfect habit and transition; but then we must consider that the mind, having formed another observation concerning the connexion of causes and effects, gives new force to its reasoning from that observation; and by means of it can build an argument on one single experiment, when duly prepared and examined. What we have found once to follow from any object we conclude will for ever follow from it; and if this maxim be not always built upon as certain, 'tis not for want of a sufficient number of experiments, but because we frequently meet with instances to the contrary'—which give rise to the other sort of weakened assurance or probability, that from 'contrary causes.'[1]

But this distinction he only professes to adopt in order to explain it away.

336. There is a great difference between the meaning which the above passage conveys when read in the light of the accepted logic of science, and that which it conveys when interpreted consistently with the theory in the statement of which it occurs. Whether Hume, in writing as he does of that conclusion from a single experiment, which our observation concerning the connexion of cause and effect enables us to draw, understood himself to be expressing his own theory or merely using the received language provisionally, one cannot be sure; but it is certain that such language can only be justified by those 'maxims of philosophers' which it is the purpose or effect of his doctrine to explain away—in particular the maxims that 'the connexion between all causes and effects is equally necessary and that its seeming uncertainty in some instances proceeds from the secret opposition of contrary causes;' and that 'what the vulgar call chance is but a concealed cause.'[2] These maxims represent the notion that the law of causation is objective and universal; that all seeming limitations to it, all 'probable and contingent matter,' are the reflections of our ignorance, and exist merely *ex parte nostrâ*. In other words, they represent the notion of that 'continued existence distinct from our perceptions,' which with Hume is a phrase generated by 'propensities to feign.' Yet he does not profess to reject them; nay, he handles them as if they were his own, but after a very little of his manipulation they are so 'translated' that they would not know themselves. Because philosophers

[1] Pp. 429 & 430.

[2] Ibid.

'allow that what the vulgar call chance is nothing but a concealed cause,' 'probability of causes' and 'probability of chances' may be taken as equivalent. But chance, as 'merely negation of a cause,' has been previously explained, on the supposition that causation means a 'perfect habit of imagination,' to be the absence of such habit—the state in which imagination is perfectly indifferent in regard to the transition from a given impression to an idea, because the transition has not been repeated often enough to form even the beginning of a habit. Such being mere chance, 'probability of chances' means a state of imagination between the perfect indifference and that perfect habit of transition, which is 'necessary connexion.' 'Probability of causes' is the same thing. Its strength or weakness depends simply on the proportion between the number of experiments ('each experiment being a kind of chance') in which A has been found to immediately follow B, and the number of those in which it has not.[1] Mere chance, probability, and causation then are equally states of imagination. The 'equal necessity of the connexion between all causes and effects' means not that any 'law of causation pervades the universe,' but that, unless the habit of transition between any feelings is 'full and perfect,' we do not speak of these feelings as related in the way of cause and effect.

Laws of nature are unqualified habits of expectation.

337. Interpreted consistently with this doctrine, the passage quoted in the last paragraph but one can only mean that, when a man has arrived at maturity, his experience of the sequence of feelings cannot fail in quantity. He must have had experience *enough* to form not only a perfect habit of transition from any impression to the idea of its usual attendant, but a habit which would act upon us even in the case of novel events, and lead us after a single experiment or a sequence confidently to expect its recurrence, if only the experience had been *uniform*. It is because it has not been so, that in many cases the habit of transition is still imperfect, and the sequence of A on B not 'proven,' but 'probable.' The probability then which affects the imagination of the matured man is of the sort that arises from 'contrary causes,' as distinct from 'imperfect experience.' This is all that the passage in question can fairly mean. Such 'proba-

[1] Pp. 424–428, 432–434.

bility' cannot become 'proof,' or the 'imperfect habit,' perfect, by *discovery* of any necessary connexion or law of causation, for the perfect habit of transition, the imagination enlivened to the maximum by custom, *is* the law of causation. The formation of the habit constitutes the law: to discover it would be to discover what does not yet exist. The incompleteness of the habit in certain directions, the limitation of our assurance to certain sequences as distinct from others, must be equally a limitation to the universality of the law. It is impossible then that on the faith of the universality of the law we should seek to extend the range of that assurance which is identical with it. Our 'observation concerning the connexion of causes and effects' merely means the sum of our assured expectations, founded on habit, at any given time, and that on the strength of this we should 'prepare an experiment,' with a view to assuring ourselves of a universal sequence from a single instance, is as unaccountable as that, given the instance, the assurance should follow.

Experience, according to his account of it, cannot be a parent of knowledge.

338. The case then stands thus. In order to make the required distinction between inference to real existence and the lively suggestion of an idea, Hume has to graft on his theory the alien notion of an objective system, an order of nature, represented by ideas of memory, and on the strength of such a notion to interpret a transition from these ideas to others, because we cannot help making it, as an objective necessity. Of such alien notion and interpretation he avails himself in his definition (understood as he means it to be understood) of cause as a 'natural relation.'[1] But he had not the boldness of his later disciples. Though he could be inconsistent so far, he could not be inconsistent far enough to make his theory of inference fit the practice of natural philosophers. Bound by his doctrine of ideas as copied from impressions, he can give no account of inferred ideas that shall explain the extension of knowledge beyond the expectation that we shall feel again what we have felt already. It was not till another theory of experience was forthcoming than that given by the philosophers who were most fond of declaring their devotion to it, that the procedure of science could be justified. The old philosophy, we are often truly

[1] See above, paragraph 317.

told, had been barren for want of contact with fact. It sought truth by a process which really consisted in evolving the 'connotation' of general names. The new birth came when the mind had learnt to leave the idols of the tribe and cave, and to cleave solely to experience. If the old philosophy, however, was superseded by science, science itself required a new philosophy to answer the question, What constitutes experience? It was in effect to answer this question that Locke and Hume wrote, and it is the condemnation of their doctrine that, according to it, experience is not a possible parent of science. It is not those, we know, who cry 'Lord, Lord!' the loudest, that enter into the kingdom of heaven, nor does the strongest assertion of our dependence on experience imply a true insight into its nature. Hume has found acceptance with men of science as the great exponent of the doctrine that there can be no new knowledge without new experience. It has not been noticed that with him such 'new experience' could only mean a further repetition of familiar feelings, and that if it means more to his followers, it is only because they have been less faithful than he was to that antithesis between thought and reality which they are not less loud in asserting.

His attitude towards doctrine of thinking substance.

339. From the point that our enquiry has reached, we can anticipate the line which Hume could not but take in regard to Self and God. His scepticism lay ready to his hand in the incompatibility between the principles of Locke and that doctrine of 'thinking substance,' which Locke and Berkeley alike maintained. If the reader will revert to the previous part of this introduction, in which that doctrine was discussed,[1] he will find it equally a commentary upon those sections of the 'Treatise on Human Nature' which deal with 'immateriality of the soul' and 'personal identity.' Substance, we saw, alike as 'extended' and as 'thinking,' was a 'creation of the mind,' yet real; something of which there was an 'idea,' but of which nothing could be said but that it was not an 'idea.' The 'thinking' substance, moreover, was at a special disadvantage in contrast with the 'extended,' because, in the first place, it could not, like body, be represented as given to consciousness in the feeling of solidity, and secondly it was not wanted. It was a mere double of the

[1] Above, paragraphs 127–135, 144–146, & 192.

extended substance to which, as the 'something wherein they do subsist and from which they do result,' our ideas had already been referred. Having no conception, then, of Spirit or Self before him but that of the thinking substance, of which Berkeley had confessed that it was not a possible idea or object of an idea, Hume had only to apply the method, by which Berkeley himself had disposed of extended substance, to get rid of Spirit likewise. This could be done in a sentence,[1] but having done it, Hume is at further pains to show that immateriality, simplicity, and identity cannot be ascribed to the soul; as if there were a soul left to which anything could be ascribed.

As to Immateriality of the Soul, he plays off Locke and Berkeley against each other,

340. There were two ways of conceiving the soul as immaterial, of which Hume was cognizant. One, current among the theologians and ordinary Cartesians and adopted by Locke, distinguishing extension and thought as severally divisible and indivisible, supposed separate substances—matter and the soul—to which these attributes, incapable of 'local conjunction,' severally belonged. The other, Berkeley's, having ostensibly reduced extended matter to a succession of feelings, took the exclusion of all 'matter' to which thought could be 'joined' as a proof that the soul was immaterial. Hume, with cool ingenuity, turns each doctrine to account against the other. From Berkeley he accepts the reduction of sensible things to sensations. Our feelings do not represent extended objects other than themselves; but we cannot admit this without acknowledging the consequence, as Berkeley himself implicitly did,[2] that certain of our impressions—those of sight and touch—are themselves extended. What then becomes of the doctrine, that the soul must be immaterial because thought is not extended, and cannot be joined to what is so? Thought means the succession of impressions. Of these some, though the smaller number, are actually extended; and those that are not so are united to those that are by the 'natural relations' of resemblance and of contiguity in time of appearance, and by the consequent relation of cause and effect.[3] The relation of local conjunction, it is true, can only obtain between impressions which are alike extended. The ascription of it to such as are unextended arises from the 'propensity in human

[1] P. 517. [2] See above, par. 177. [3] Pp. 520-521.

nature, when objects are united by any relation, to add some new relation in order to complete the union.'[1] This admission, however, can yield no triumph to those who hold that thought can only be joined to a 'simple and indivisible substance.' If the existence of unextended impressions requires the supposition of a thinking substance 'simple and indivisible,' the existence of extended ones must equally imply a thinking substance that has all the properties of extended objects. If it is absurd to suppose that perceptions which are unextended can belong to a substance which is extended, it is equally absurd to suppose that perceptions which are extended can belong to a substance that is not so. Thus Berkeley's criticism has indeed prevailed against the vulgar notion of a material substance as opposed to a thinking one, but meanwhile he is himself 'hoist with his own petard.' If that thinking substance, the survival of which was the condition of his theory serving its theological purpose,[2] is to survive at all, it can only be as equivalent to Spinoza's substance, in which 'both matter and thought were supposed to inhere.' The universe of our experience —'the sun, moon, and stars; the earth, seas, plants, animals, men, ships, houses, and other productions, either of art or nature'—is the same universe when it is called 'the universe of objects or of body,' and when it is called 'the universe of thought, or of impressions and ideas;' but to hold, according to Spinoza's 'hideous hypothesis,' that 'the universe of objects or of body' inheres in one simple uncompounded substance, is to rouse 'a hundred voices of scorn and detestation;' while the same hypothesis in regard to the 'universe of impressions and ideas' is treated 'with applause and veneration.' It was to save God and Immortality that the 'great philosopher,' who had found the true way out of the scholastic absurdity of abstract ideas,[3] had yet clung to the 'unintelligible chimæra' of thinking substance; and after all, in doing so, he fell into a 'true atheism,' indistinguishable from that which had rendered the unbelieving Jew 'so universally infamous.'[4]

and proves Berkeley a Spinozist.

341. The supposition of spiritual substance being thus at once absurd, and of a tendency the very opposite of the

Causality of spirit

[1] P. 521.
[2] See above, paragraphs 191 and foll.
[3] See page 325.
[4] Pp. 523–526.

treated in the same way.

purpose it was meant to serve, can anything better be said for the supposition of a spiritual cause? It was to the representation of spirit as cause rather than as substance, it will be remembered, that both Locke and Berkeley trusted for the establishment of a Theism which should not be Pantheism.[1] Locke, in his demonstration of the being of God, trusted for proof of a first cause to the inference from that which begins to exist to something having power to produce it, and to the principle of necessary connexion—connexion in the way of agreement of ideas—between cause and effect for proof that this first cause must be immaterial, even as its effect, viz. our thought, is. Hume's doctrine of causation, of course, renders both sides of the demonstration unmeaning. Inference being only the suggestion by a feeling of the image of its 'usual attendant,' there can be no inference to that which is not a possible image of an impression. Nor, since causation merely means the constant conjunction of impressions, and there is no such contrariety between the impression we call 'motion of matter' and that we call 'thought,' any more than between any other impressions,[2] as is incompatible with their constant conjunction, is there any reason why we should set aside the hourly experience, which tells us that bodily motions are the cause of thoughts and sentiments? If, however, there were that necessary connexion between effect and cause, by which Locke sought to show the spirituality of the first cause, it would really go to show just the reverse of infinite power in such cause. It is from our impressions and ideas that we are supposed to infer this cause; but in these—as Berkeley had shown, and shown as his way of proving the existence of God—there is no efficacy whatever. They are 'inert.' If then the cause must agree with the effect, the Supreme Being, as the cause of our impressions and ideas, must be 'inert' likewise. If, on the other hand, with Berkeley we cling to the notion that there must be efficient power somewhere, and having excluded it from the relation

[1] See above, §§ 147, 171, 193.

[2] There is no contrariety, according to Hume, except between existence and non-existence (p. 323) and as all impressions and ideas equally exist (p. 394), there can be no contrariety between any of them. He does indeed in certain leading passages allow himself to speak of contrariety between ideas (*e.g.* pp. 494 and 535), which is incidental evidence that the ideas there treated of are not so, according to his account of ideas, at all.

of ideas to each other or of matter to ideas, find it in the direct relation of God to ideas, we fall 'into the grossest impieties;' for it will follow that God 'is the author of all our volitions and impressions.'[1]

Disposes of 'personal identity by showing contradictions in Locke's account of it.

342. Against the doctrine of a real 'identity of the self or person' Hume had merely to exhibit the contradictions which Locke's own statement of it involves.[2] To have transferred this identity definitely from 'matter' to consciousness was in itself a great merit, but, so transferred, in the absence of any other theory of consciousness than Locke's, it only becomes more obviously a fiction. If there is nothing real but the succession of feelings, identity of body, it is true, disappears as inevitably as identity of mind; and so we have already found it to do in Hume.[3] But whereas the notion of a unity of body throughout the succession of perceptions only becomes contradictory through the medium of a reduction of body to a succession of perceptions, the identity of a mind, which has been already defined as a succession of perceptions, is a contradiction in terms. There can be 'properly no simplicity in it at one time, nor identity at different; it is a kind of theatre where several perceptions successively make their appearance.' But this comparison must not mislead us. 'They are the successive perceptions only, that constitute the mind; nor have we the most distant notion of the place where these scenes are represented, or of the materials of which it is composed.' The problem for Hume then in regard to personal, as it had been in regard to bodily, identity is to account for that 'natural propension to imagine' it which language implies.

Yet can only account for it as a 'fiction' by supposing ideas which with him are impossible.

343. The method of explanation in each case is the same. He starts with two suppositions, to neither of which he is logically entitled. One is that we have a 'distinct idea of identity or sameness,' *i.e.* of an object that remains invariable and uninterrupted through a supposed variation of time' —a supposition which, as we have seen, upon his principles must mean that a feeling, which is one in a succession of feelings, is yet all the successive feelings at once. The other

[1] Pp. 529–531, a commentary on the argument here given has been in effect supplied in paragraphs 148–152, and 194.

[2] See above, §§ 134 and foll.

[3] See above, §§ 306 and foll.

is that we have an idea 'of several different objects existing in succession, and connected together by a close' (natural) 'relation'—which in like manner implies that a feeling, which is one among a succession of feelings, is at the same time a consciousness of these feelings as successive and under that qualification by mutual relation which implies their equal presence to it. These two ideas, which in truth are 'distinct and even contrary,'[1] we yet come to confuse with each other, because 'that action of the imagination, by which we consider the uninterrupted and invisible object, and that by which we reflect on the succession of related objects, are almost the same to the feeling.' Thus, though what we call our mind is really a 'succession of related objects,' we have a strong propensity to mistake it for an 'invariable and uninterrupted object.' To this propensity we at last so far yield as to assert our successive perceptions to be in effect the same, however interrupted and variable; and then, by way of 'justifying to ourselves this absurdity, feign the continued existence of the perceptions of our senses, to remove the interruption; and run into the notion of a *soul*, and *self*, and *substance*, to disguise the variation.'[2]

In origin this 'fiction' the same as that of 'Body.'

344. It will be seen that the theory, which we have just summarised, would merely be a briefer version of that given in the section on 'Scepticism with regard to the Senses,' if in the sentence, which states its conclusion, for 'the notion of a soul and self and substance' were written 'the notion of a double existence of perceptions and objects.'[3] To a reader who has not thoroughly entered into the fusion of being and feeling, which belongs to the 'new way of ideas,' it may seem strange that one and the same process of so-called confusion has to account for such apparently disparate results, as the notion of a permanently identical self and that of the distinct existence of body. If he bears in mind, however, that with Hume the universe of our experience is the same when it is called 'the universe of objects or of body' and when it is called the 'universe of thought or my impressions and ideas,'[4] he will see that on the score of consistency Hume is to be blamed, not for applying the same method to account for the fictions of material and spiritual identity, but for allowing himself, in his preference for physical, as

[1] See note to § 341.
[2] Pp. 535–536.
[3] Above, §§ 306–310.
[4] Above, § 340.

against theological, pretension, to write as if the supposition of spiritual were really distinct from that of material identity, and might be more contemptuously disposed of. The original 'mistake,' out of which according to him the two fictitious suppositions arise, is one and the same; and though it is a 'mistake' without which, as we have found[1] from Hume's own admissions, we could not speak even in singular propositions of the most ordinary 'objects of sense'—this pen, this table, this chair—it is yet one that on his principles is logically impossible, since it consists in a confusion between ideas that we cannot have. Of this original 'mistake' the fictions of body and of its 'continued and distinct existence' are but altered expressions. They represent in truth the same logical category of substance and relation. And of the Self according to Locke's notion of it[2] (which was the only one that Hume had in view), as a 'thinking thing' within each man among a multitude of other thinking things, the same would have to be said. But in order to account for the 'mistake,' of which the suppositions of thinking and material substance are the correlative expressions, and which it is the net result of Hume's speculation to exhibit at once as necessary and as impossible, we have found another notion of the self forced upon us—not as a double of body, but as the source of that 'familiar theory' which body in truth is, and without which there would be no universe of objects, whether 'bodies' or 'impressions and ideas,' at all.

Possibility of such fictitious ideas implies refutation of Hume's doctrine.

345. Thus the more strongly Hume insists that 'the identity which we ascribe to the mind of man is only a fictitious one,'[3] the more completely does his doctrine refute itself. If he had really succeeded in reducing those 'invented' relations, which Locke had implicitly recognised as the framework of the universe, to what he calls 'natural' ones—to mere sequences of feeling—the case would have been different. With the disappearance of the conception of the world as a system of related elements, the necessity of a thinking subject, without whose presence to feelings they could not become such elements, would have disappeared likewise. But he cannot so reduce them. In all his attempts to do so we find that the relation, which has to be explained away, is pre-supposed under some other expression, and that

[1] Above, §§ 303 & 304. [2] Above, §§ 129–132. [3] P. 540.

it is 'fictitious' not in the sense which Hume's theory requires—the sense, namely, that there is no such thing either really or in imagination, either as impression or idea—but in the sense that it would not exist if we did not think about our feelings. Thus, whereas identity ought for Hume's purpose to be either a 'natural relation,' or a propensity arising from such relation, or nothing, we find that according to his account, though neither natural relation nor propensity, it yet exists both as idea and as reality. He saves appearances indeed by saying[1] that natural relations of ideas 'produce it,' but they do so, according to his detailed account of the matter, in the sense that, the idea of an identical object being given, we mistake our successive and resembling feelings for such an object. In other words, the existence of numerically identical things is a 'fiction,' not as if there were no such things, but because it implies a certain operation of thought upon our feelings, a certain interpretation of impressions under direction of an idea not derived from impressions. By a like equivocal use of 'fiction' Hume covers the admission of real identity in its more complex forms—the identity of a mass, whose parts undergo perpetual change of distribution; of a body whose form survives not merely the redistribution of its materials, but the substitution of others; of animals and vegetables, in which nothing but the 'common end' of the changing members remains the same. The reality of such identity of mass, of form, of organism, he quietly takes for granted.[2] He calls it 'fictitious' indeed, but only either in the sense above given or in the sense that it is mistaken for mere numerical identity.

346. After he has thus admitted, as constituents of the 'universe of objects,' a whole hierarchy of ideas of which the simplest must vanish before the demand to 'point out the impression from which it is derived,' we are the less surprised to find him pronouncing in conclusion 'that the true idea of the human mind is to consider it as a system of different perceptions or different existences, which are

[1] P. 543. 'Identity depends on the relations of ideas; and these relations produce identity by means of that easy transition they occasion.' Strictly it should be 'that easy transition in which they consist;' since, according to Hume, the 'easiness of transition' is not an effect of natural relation, but constitutes it. Cf. pp. 322 & 497, and above, § 318.

[2] Pp. 536–538.

linked together by the relation of cause and effect, and mutually produce, destroy, influence and modify each other.'[1] A better definition than this, as a *definition of nature*, or one more charged with 'fictions of thought,' could scarcely be desired. If the idea of such a system is a true idea at all, which we are only wrong in confusing with mere numerical identity, we need be the less concerned that it should be adduced as the true idea not of nature but of the 'human mind.' Having learnt, through the discipline which Hume himself furnishes, that the recognition of a system of nature logically carries with it that of a self-conscious subject, in relation to which alone 'different perceptions' become a system of nature, we know that we cannot naturalise the 'human mind' without presupposing that which is neither nature nor natural, though apart from it nature would not be —that of which the designation as 'mind,' as 'human,' as 'personal,' is of secondary importance, but which is eternal, self-determined, and thinks.

T. H. Green.

[1] P. 541.

A

TREATISE

OF

Human Nature:

BEING

An ATTEMPT to introduce the experimental Method of Reasoning

INTO

MORAL SUBJECTS.

Rara temporum felicitas, ubi sentire, quæ velis; & quæ sentias, dicere licet. TACIT.

VOL. I.

OF THE

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MDCCXXXIX.

ADVERTISEMENT.

My design in the present work is sufficiently explain'd in the Introduction. The reader must only observe, that all the subjects I have there plann'd out to myself, are not treated of in these two volumes. The subjects of the Understanding and Passions make a compleat chain of reasoning by themselves; and I was willing to take advantage of this natural division, in order to try the taste of the public. If I have the good fortune to meet with success, I shall proceed to the examination of Morals, Politics, and Criticism; which will compleat this Treatise of Human Nature. The approbation of the public I consider as the greatest reward of my labours; but am determin'd to regard its judgment, whatever it be, as my best instruction.

A TREATISE

OF

HUMAN NATURE.

INTRODUCTION.

INTRO-DUCTION

NOTHING is more usual and more natural for those, who pretend to discover anything new to the world in philosophy and the sciences, than to insinuate the praises of their own systems, by decrying all those, which have been advanced before them. And indeed were they content with lamenting that ignorance, which we still lie under in the most important questions, that can come before the tribunal of human reason, there are few, who have an acquaintance with the sciences, that would not readily agree with them. 'Tis easy for one of judgment and learning, to perceive the weak foundation even of those systems, which have obtained the greatest credit, and have carried their pretensions highest to accurate and profound reasoning. Principles taken upon trust, consequences lamely deduced from them, want of coherence in the parts, and of evidence in the whole, these are every where to be met with in the systems of the most eminent philosophers, and seem to have drawn disgrace upon philosophy itself.

Nor is there requir'd such profound knowledge to discover the present imperfect condition of the sciences, but even the rabble without doors may judge from the noise and clamour, which they hear, that all goes not well within. There is nothing which is not the subject of debate, and in which men of learning are not of contrary opinions. The most

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trivial question escapes not our controversy, and in the most momentous we are not able to give any certain decision. Disputes are multiplied, as if every thing was uncertain; and these disputes are managed with the greatest warmth, as if every thing was certain. Amidst all this bustle 'tis not reason, which carries the prize, but eloquence; and no man needs ever despair of gaining proselytes to the most extravagant hypothesis, who has art enough to represent it in any favourable colours. The victory is not gained by the men at arms, who manage the pike and the sword; but by the trumpeters, drummers, and musicians of the army.

From hence in my opinion arises that common prejudice against metaphysical reasonings of all kinds, even amongst those, who profess themselves scholars, and have a just value for every other part of literature. By metaphysical reasonings, they do not understand those on any particular branch of science, but every kind of argument, which is any way abstruse, and requires some attention to be comprehended. We have so often lost our labour in such researches, that we commonly reject them without hesitation, and resolve, if we must for ever be a prey to errors and delusions, that they shall at least be natural and entertaining. And indeed nothing but the most determined scepticism, along with a great degree of indolence, can justify this aversion to metaphysics. For if truth be at all within the reach of human capacity, 'tis certain it must lie very deep and abstruse; and to hope we shall arrive at it without pains, while the greatest geniuses have failed with the utmost pains, must certainly be esteemed sufficiently vain and presumptuous. I pretend to no such advantage in the philosophy I am going to unfold, and would esteem it a strong presumption against it, were it so very easy and obvious.

'Tis evident, that all the sciences have a relation, greater or less, to human nature; and that however wide any of them may seem to run from it, they still return back by one passage or another. Even *Mathematics*, *Natural Philosophy*, *and Natural Religion*, are in some measure dependent on the science of MAN; since they lie under the cognizance of men, and are judged of by their powers and faculties. 'Tis impossible to tell what changes and improvements we might make in these sciences were we thoroughly acquainted with

the extent and force of human understanding, and cou'd explain the nature of the ideas we employ, and of the operations we perform in our reasonings. And these improvements are the more to be hoped for in natural religion, as it is not content with instructing us in the nature of superior powers, but carries its views farther, to their disposition towards us, and our duties towards them; and consequently we ourselves are not only the beings, that reason, but also one of the objects, concerning which we reason.

If therefore the sciences of Mathematics, Natural Philosophy, and Natural Religion, have such a dependence on the knowledge of man, what may be expected in the other sciences, whose connexion with human nature is more close and intimate? The sole end of logic is to explain the principles and operations of our reasoning faculty, and the nature of our ideas: morals and criticism regard our tastes and sentiments: and politics consider men as united in society, and dependent on each other. In these four sciences of *Logic, Morals, Criticism, and Politics,* is comprehended almost everything, which it can any way import us to be acquainted with, or which can tend either to the improvement or ornament of the human mind.

Here then is the only expedient, from which we can hope for success in our philosophical researches, to leave the tedious lingering method, which we have hitherto followed, and instead of taking now and then a castle or village on the frontier, to march up directly to the capital or center of these sciences, to human nature itself; which being once masters of, we may every where else hope for an easy victory. From this station we may extend our conquests over all those sciences, which more intimately concern human life, and may afterwards proceed at leisure to discover more fully those, which are the objects of pure curiosity. There is no question of importance, whose decision is not compriz'd in the science of man; and there is none, which can be decided with any certainty, before we become acquainted with that science. In pretending, therefore, to explain the principles of human nature, we in effect propose a compleat system of the sciences, built on a foundation almost entirely new, and the only one upon which they can stand with any security.

And as the science of man is the only solid foundation for

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the other sciences, so the only solid foundation we can give to this science itself must be laid on experience and observation. 'Tis no astonishing reflection to consider, that the application of experimental philosophy to moral subjects should come after that to natural at the distance of above a whole century; since we find in fact, that there was about the same interval betwixt the origins of these sciences; and that reckoning from THALES to SOCRATES, the space of time is nearly equal to that betwixt my Lord Bacon and some late philosophers in *England*,[1] who have begun to put the science of man on a new footing, and have engaged the attention, and excited the curiosity of the public. So true it is, that however other nations may rival us in poetry, and excel us in some other agreeable arts, the improvements in reason and philosophy can only be owing to a land of toleration and of liberty.

Nor ought we to think, that this latter improvement in the science of man will do less honour to our native country than the former in natural philosophy, but ought rather to esteem it a greater glory, upon account of the greater importance of that science, as well as the necessity it lay under of such a reformation. For to me it seems evident, that the essence of the mind being equally unknown to us with that of external bodies, it must be equally impossible to form any notion of its powers and qualities otherwise than from careful and exact experiments, and the observation of those particular effects, which result from its different circumstances and situations. And tho' we must endeavour to render all our principles as universal as possible, by tracing up our experiments to the utmost, and explaining all effects from the simplest and fewest causes, 'tis still certain we cannot go beyond experience; and any hypothesis, that pretends to discover the ultimate original qualities of human nature, ought at first to be rejected as presumptuous and chimerical.

I do not think a philosopher, who would apply himself so earnestly to the explaining the ultimate principles of the soul, would show himself a great master in that very science of human nature, which he pretends to explain, or very knowing in what is naturally satisfactory to the mind of man. For nothing is more certain, than that despair has

[1] Mr. *Locke*, my Lord *Shaftsbury*, Dr. *Mandeville*, Mr. *Hutchinson*, Dr. *Butler*, &c.

almost the same effect upon us with enjoyment, and that we are no sooner acquainted with the impossibility of satisfying any desire, than the desire itself vanishes. When we see, that we have arrived at the utmost extent of human reason, we sit down contented, tho' we be perfectly satisfied in the main of our ignorance, and perceive that we can give no reason for our most general and most refined principles, beside our experience of their reality; which is the reason of the mere vulgar, and what it required no study at first to have discovered for the most particular and most extraordinary phænomenon. And as this impossibility of making any farther progress is enough to satisfy the reader, so the writer may derive a more delicate satisfaction from the free confession of his ignorance, and from his prudence in avoiding that error, into which so many have fallen, of imposing their conjectures and hypotheses on the world for the most certain principles. When this mutual contentment and satisfaction can be obtained betwixt the master and scholar, I know not what more we can require of our philosophy.

But if this impossibility of explaining ultimate principles should be esteemed a defect in the science of man, I will venture to affirm, that 'tis a defect common to it with all the sciences, and all the arts, in which we can employ ourselves, whether they be such as are cultivated in the schools of the philosophers, or practised in the shops of the meanest artizans. None of them can go beyond experience, or establish any principles which are not founded on that authority. Moral philosophy has, indeed, this peculiar disadvantage, which is not found in natural, that in collecting its experiments, it cannot make them purposely, with premeditation, and after such a manner as to satisfy itself concerning every particular difficulty which may arise. When I am at a loss to know the effects of one body upon another in any situation, I need only put them in that situation, and observe what results from it. But should I endeavour to clear up after the same manner any doubt in moral philosophy, by placing myself in the same case with that which I consider, 'tis evident this reflection and premeditation would so disturb the operation of my natural principles, as must render it impossible to form any just conclusion from the phænomenon. We must therefore glean up our experiments in this science from a cautious observation of human life, and take them as

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they appear in the common course of the world, by men's behaviour in company, in affairs, and in their pleasures. Where experiments of this kind are judiciously collected and compared, we may hope to establish on them a science which will not be inferior in certainty, and will be much superior in utility to any other of human comprehension.

BOOK I.

OF THE UNDERSTANDING.

PART I.

OF IDEAS, THEIR ORIGIN, COMPOSITION, CONNEXION, ABSTRACTION, ETC.

SECT. I.—*Of the Origin of our Ideas.*

SECT. I.

Of the origin of our ideas.

ALL the perceptions of the human mind resolve themselves into two distinct kinds, which I shall call IMPRESSIONS and IDEAS. The difference betwixt these consists in the degrees of force and liveliness, with which they strike upon the mind, and make their way into our thought or consciousness. Those perceptions, which enter with most force and violence, we may name *impressions;* and under this name I comprehend all our sensations, passions and emotions, as they make their first appearance in the soul. By *ideas* I mean the faint images of these in thinking and reasoning; such as, for instance, are all the perceptions excited by the present discourse, excepting only those which arise from the sight and touch, and excepting the immediate pleasure or uneasiness it may occasion. I believe it will not be very necessary to employ many words in explaining this distinction. Every one of himself will readily perceive the difference betwixt feeling and thinking. The common degrees of these are easily distinguished; tho' it is not impossible but in particular instances they may very nearly approach to each other. Thus in sleep, in a fever, in madness, or in any very violent emotions of soul, our ideas may approach to our impressions: As on the other hand it sometimes happens, that our impressions are so faint and low, that we cannot dis-

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tinguish them from our ideas. But notwithstanding this near resemblance in a few instances, they are in general so very different, that no-one can make a scruple to rank them under distinct heads, and assign to each a peculiar name to mark the difference.[1]

There is another division of our perceptions, which it will be convenient to observe, and which extends itself both to our impressions and ideas. This division is into SIMPLE and COMPLEX. Simple perceptions or impressions and ideas are such as admit of no distinction nor separation. The complex are the contrary to these, and may be distinguished into parts. Tho' a particular colour, taste, and smell, are qualities all united together in this apple, 'tis easy to perceive they are not the same, but are at least distinguishable from each other.

Having by these divisions given an order and arrangement to our objects, we may now apply ourselves to consider with the more accuracy their qualities and relations. The first circumstance, that strikes my eye, is the great resemblance betwixt our impressions and ideas in every other particular, except their degree of force and vivacity. The one seem to be in a manner the reflexion of the other; so that all the perceptions of the mind are double, and appear both as impressions and ideas. When I shut my eyes and think of my chamber, the ideas I form are exact representations of the impressions I felt; nor is there any circumstance of the one, which is not to be found in the other. In running over my other perceptions, I find still the same resemblance and representation. Ideas and impressions appear always to correspond to each other. This circumstance seems to me remarkable, and engages my attention for a moment.

Upon a more accurate survey I find I have been carried away too far by the first appearance, and that I must make use of the distinction of perceptions into *simple and complex*, to limit this general decision, *that all our ideas and impres-*

[1] I here make use of these terms, *impression and idea*, in a sense different from what is usual, and I hope this liberty will be allowed me. Perhaps I rather restore the word, idea, to its original sense, from which Mr. Locke had perverted it, in making it stand for all our perceptions. By the term of impression I would not be understood to express the manner, in which our lively perceptions are produced in the soul, but merely the perceptions themselves; for which there is no particular name either in the *English* or any other language, that I know of.

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sions are resembling. I observe, that many of our complex ideas never had impressions, that corresponded to them, and that many of our complex impressions never are exactly copied in ideas. I can imagine to myself such a city as the *New Jerusalem*, whose pavement is gold and walls are rubies, tho' I never saw any such. I have seen *Paris;* but shall I affirm I can form such an idea of that city, as will perfectly represent all its streets and houses in their real and just proportions?

I perceive, therefore, that tho' there is in general a great resemblance betwixt our *complex* impressions and ideas, yet the rule is not universally true, that they are exact copies of each other. We may next consider how the case stands with our *simple* perceptions. After the most accurate examination, of which I am capable, I venture to affirm, that the rule here holds without any exception, and that every simple idea has a simple impression, which resembles it, and every simple impression a correspondent idea. That idea of red, which we form in the dark, and that impression which strikes our eyes in sun-shine, differ only in degree, not in nature. That the case is the same with all our simple impressions and ideas, 'tis impossible to prove by a particular enumeration of them. Every one may satisfy himself in this point by running over as many as he pleases. But if any one should deny this universal resemblance, I know no way of convincing him, but by desiring him to shew a simple impression, that has not a correspondent idea, or a simple idea, that has not a correspondent impression. If he does not answer this challenge, as 'tis certain he cannot, we may from his silence and our own observation establish our conclusion.

Thus we find, that all simple ideas and impressions resemble each other; and as the complex are formed from them, we may affirm in general, that these two species of perception are exactly correspondent. Having discover'd this relation, which requires no farther examination, I am curious to find some other of their qualities. Let us consider how they stand with regard to their existence, and which of the impressions and ideas are causes, and which effects.

The *full* examination of this question is the subject of the

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present treatise; and therefore we shall here content ourselves with establishing one general proposition, *That all our simple ideas in their first appearance are deriv'd from simple impressions, which are correspondent to them, and which they exactly represent.*[1]

In seeking for phænomena to prove this proposition, I find only those of two kinds; but in each kind the phænomena are obvious, numerous, and conclusive. I first make myself certain, by a new review, of what I have already asserted, that every simple impression is attended with a correspondent idea, and every simple idea with a correspondent impression. From this constant conjunction of resembling perceptions I immediately conclude, that there is a great connexion betwixt our correspondent impressions and ideas, and that the existence of the one has a considerable influence upon that of the other. Such a constant conjunction, in such an infinite number of instances, can never arise from chance; but clearly proves a dependence of the impressions on the ideas, or of the ideas on the impressions. That I may know on which side this dependence lies, I consider the order of their *first appearance*; and find by constant experience, that the simple impressions always take the precedence of their correspondent ideas, but never appear in the contrary order. To give a child an idea of scarlet or orange, of sweet or bitter, I present the objects, or in other words, convey to him these impressions; but proceed not so absurdly, as to endeavour to produce the impressions by exciting the ideas. Our ideas upon their appearance produce not their correspondent impressions, nor do we perceive any colour, or feel any sensation merely upon thinking of them. On the other hand we find, that any impression either of the mind or body is constantly followed by an idea, which resembles it, and is only different in the degrees of force and liveliness. The constant conjunction of our resembling perceptions, is a convincing proof, that the one are the causes of the other; and this priority of the impressions is an equal proof, that our impressions are the causes of our ideas, not our ideas of our impressions.

To confirm this I consider another plain and convincing phænomenon; which is, that where-ever by any accident the

[1] Introd.: paragraphs 195–197.

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faculties, which give rise to any impressions, are obstructed in their operations, as when one is born blind or deaf; not only the impressions are lost, but also their correspondent ideas; so that there never appear in the mind the least traces of either of them. Nor is this only true, where the organs of sensation are entirely destroy'd, but likewise where they have never been put in action to produce a particular impression. We cannot form to ourselves a just idea of the taste of a pine apple, without having actually tasted it.

There is however one contradictory phænomenon, which may prove, that 'tis not absolutely impossible for ideas to go before their correspondent impressions. I believe it will readily be allow'd that the several distinct ideas of colours, which enter by the eyes, or those of sounds, which are convey'd by the hearing, are really different from each other, tho' at the same time resembling. Now if this be true of different colours, it must be no less so of the different shades of the same colour, that each of them produces a distinct idea, independent of the rest. For if this shou'd be deny'd, 'tis possible, by the continual gradation of shades, to run a colour insensibly into what is most remote from it; and if you will not allow any of the means to be different, you cannot without absurdity deny the extremes to be the same. Suppose therefore a person to have enjoyed his sight for thirty years, and to have become perfectly well acquainted with colours of all kinds, excepting one particular shade of blue, for instance, which it never has been his fortune to meet with. Let all the different shades of that colour, except that single one, be plac'd before him, descending gradually from the deepest to the lightest; 'tis plain, that he will perceive a blank, where that shade is wanting, and will be sensible, that there is a greater distance in that place betwixt the contiguous colours, than in any other. Now I ask, whether 'tis possible for him, from his own imagination, to supply this deficiency, and raise up to himself the idea of that particular shade, tho' it had never been conveyed to him by his senses? I believe there are few but will be of opinion that he can; and this may serve as a proof, that the simple ideas are not always derived from the correspondent impressions; tho' the instance is so particular and singular, that 'tis scarce worth

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our observing, and does not merit that for it alone we should alter our general maxim.

But, besides this exception, it may not be amiss to remark on this head, that the principle of the priority of impressions to ideas must be understood with another limitation, *viz.* that as our ideas are images of our impressions, so we can form secondary ideas, which are images of the primary; as appears from this very reasoning concerning them. This is not, properly speaking, an exception to the rule so much as an explanation of it. Ideas produce the images of themselves in new ideas; but as the first ideas are supposed to be derived from impressions, it still remains true, that all our simple ideas proceed either mediately or immediately, from their correspondent impressions.

This then is the first principle I establish in the science of human nature; nor ought we to despise it because of the simplicity of its appearance. For 'tis remarkable, that the present question concerning the precedency of our impressions or ideas, is the same with what has made so much noise in other terms, when it has been disputed whether there be any *innate ideas*, or whether all ideas be derived from sensation and reflexion. We may observe, that in order to prove the ideas of extension and colour not to be innate, philosophers do nothing but shew that they are conveyed by our senses. To prove the ideas of passion and desire not to be innate, they observe that we have a preceding experience of these emotions in ourselves. Now if we carefully examine these arguments, we shall find that they prove nothing but that ideas are preceded by other more lively perceptions, from which they are derived, and which they represent. I hope this clear stating of the question will remove all disputes concerning it, and will render this principle of more use in our reasonings, than it seems hitherto to have been.

SECT. II.—*Division of the Subject.*

Since it appears, that our simple impressions are prior to their correspondent ideas, and that the exceptions are very rare, method seems to require we should examine our impressions, before we consider our ideas. Impressions may be divided into two kinds, those of SENSATION and those of

REFLEXION. The first kind arises in the soul originally, from unknown causes. The second is derived in a great measure from our ideas, and that in the following order. An impression first strikes upon the senses, and makes us perceive heat or cold, thirst or hunger, pleasure or pain of some kind or other. Of this impression there is a copy taken by the mind, which remains after the impression ceases; and this we call an idea. This idea of pleasure or pain, when it returns upon the soul, produces the new impressions of desire and aversion, hope and fear, which may properly be called impressions of reflexion, because derived from it. These again are copied by the memory and imagination, and become ideas; which perhaps in their turn give rise to other impressions and ideas. So that the impressions of reflexion are only antecedent to their correspondent ideas; but posterior to those of sensation, and deriv'd from them. The examination of our sensations belongs more to anatomists and natural philosophers than to moral; and therefore shall not at present be enter'd upon. And as the impressions of reflexion, *viz.* passions, desires, and emotions, which principally deserve our attention, arise mostly from ideas, 'twill be necessary to reverse that method, which at first sight seems most natural; and in order to explain the nature and principles of the human mind, give a particular account of ideas, before we proceed to impressions. For this reason I have here chosen to begin with ideas.[1]

SECT. II.

Division of the subject.

SECT. III.—*Of the Ideas of the Memory and Imagination.*

We find by experience, that when any impression has been present with the mind, it again makes its appearance there as an idea; and this it may do after two different ways: either when in its new appearance it retains a considerable degree of its first vivacity, and is somewhat intermediate betwixt an impression and an idea; or when it entirely loses that vivacity, and is a perfect idea. The faculty, by which we repeat our impressions in the first manner, is called the MEMORY, and the other the IMAGINATION. 'Tis evident at first sight, that the ideas of the memory are much more lively and strong than those of the imagination, and that

[1] Introd.: paragraph 201.

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the former faculty paints its objects in more distinct colours, than any which are employ'd by the latter. When we remember any past event, the idea of it flows in upon the mind in a forcible manner; whereas in the imagination the perception is faint and languid, and cannot without difficulty be preserv'd by the mind steddy and uniform for any considerable time. Here then is a sensible difference betwixt one species of ideas and another. But of this more fully hereafter.[1]

There is another difference betwixt these two kinds of ideas, which is no less evident, namely that tho' neither the ideas, of the memory nor imagination, neither the lively nor faint ideas can make their appearance in the mind, unless their correspondent impressions have gone before to prepare the way for them, yet the imagination is not restrain'd to the same order and form with the original impressions; while the memory is in a manner ty'd down in that respect, without any power of variation.[2]

'Tis evident, that the memory preserves the original form, in which its objects were presented, and that where-ever we depart from it in recollecting any thing, it proceeds from some defect or imperfection in that faculty. An historian may, perhaps, for the more convenient carrying on of his narration, relate an event before another, to which it was in fact posterior; but then he takes notice of this disorder, if he be exact; and by that means replaces the idea in its due position. 'Tis the same case in our recollection of those places and persons, with which we were formerly acquainted. The chief exercise of the memory is not to preserve the simple ideas, but their order and position. In short, this principle is supported by such a number of common and vulgar phænomena, that we may spare ourselves the trouble of insisting on it any farther.

The same evidence follows us in our second principle, *of the liberty of the imagination to transpose and change its ideas.* The fables we meet with in poems and romances put this entirely out of the question. Nature there is totally confounded, and nothing mentioned but winged horses, fiery dragons, and monstrous giants. Nor will this liberty of the fancy appear strange, when we consider, that all our ideas are

[1] Part III., Sect. 5. [2] Introd.: paragraph 195.

copy'd from our impressions,[1] and that there are not any two impressions which are perfectly inseparable. Not to mention, that this is an evident consequence of the division of ideas into simple and complex. Where-ever the imagination perceives a difference among ideas, it can easily produce a separation.

SECT. III. Of the ideas of the memory and imagination.

SECT. IV.—*Of the Connexion or Association of Ideas.*

As all simple ideas may be separated by the imagination, and may be united again in what form it pleases, nothing wou'd be more unaccountable than the operations of that faculty, were it not guided by some universal principles, which render it, in some measure, uniform with itself in all times and places. Were ideas entirely loose and unconnected, chance alone wou'd join them; and 'tis impossible the same simple ideas should fall regularly into complex ones (as they commonly do) without some bond of union among them, some associating quality, by which one idea naturally introduces another. This uniting principle among ideas is not to be consider'd as an inseparable connexion; for that has been already excluded from the imagination: Nor yet are we to conclude, that without it the mind cannot join two ideas; for nothing is more free than that faculty: but we are only to regard it as a gentle force, which commonly prevails, and is the cause why, among other things, languages so nearly correspond to each other; nature in a manner pointing out to every one those simple ideas, which are most proper to be united in a complex one. The qualities, from which this association arises, and by which the mind is after this manner convey'd from one idea to another, are three, *viz.* RESEMBLANCE, CONTIGUITY in time or place, and CAUSE and EFFECT.

I believe it will not be very necessary to prove, that these qualities produce an association among ideas, and upon the appearance of one idea naturally introduce another. 'Tis plain, that in the course of our thinking, and in the constant revolution of our ideas, our imagination runs easily from one idea to any other that *resembles* it, and that this quality alone is to the fancy a sufficient bond and association. 'Tis likewise evident, that as the senses, in changing their objects,

[1] Introd.: paragraph 251, with the passages there referred to.

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are necessitated to change them regularly, and take them as they lie *contiguous* to each other, the imagination must by long custom acquire the same method of thinking, and run along the parts of space and time in conceiving its objects. As to the connexion, that is made by the relation of *cause and effect*, we shall have occasion afterwards to examine it to the bottom, and therefore shall not at present insist upon it. 'Tis sufficient to observe, that there is no relation, which produces a stronger connexion in the fancy, and makes one idea more readily recall another, than the relation of cause and effect betwixt their objects.

That we may understand the full extent of these relations, we must consider, that two objects are connected together in the imagination, not only when the one is immediately resembling, contiguous to, or the cause of the other, but also when there is interposed betwixt them a third object, which bears to both of them any of these relations. This may be carried on to a great length; tho' at the same time we may observe, that each remove considerably weakens the relation. Cousins in the fourth degree are connected by *causation*, if I may be allowed to use that term; but not so closely as brothers, much less as child and parent. In general we may observe, that all the relations of blood depend upon cause and effect, and are esteemed near or remote, according to the number of connecting causes interpos'd betwixt the persons.

Of the three relations above-mention'd this of causation is the most extensive. Two objects may be consider'd as plac'd in this relation, as well when one is the cause of any of the actions or motions of the other, as when the former is the cause of the existence of the latter. For as that action or motion is nothing but the object itself, consider'd in a certain light, and as the object continues the same in all its different situations, 'tis easy to imagine how such an influence of objects upon one another may connect them in the imagination.

We may carry this farther, and remark, not only that two objects are connected by the relation of cause and effect, when the one produces a motion or any action in the other, but also when it has a power of producing it. And this we may observe to be the source of all the relations of interest and duty, by which men influence each other in society, and

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are plac'd in the ties of government and subordination. A master is such-a-one as by his situation, arising either from force or agreement, has a power of directing in certain particulars the actions of another, whom we call servant. A judge is one, who in all disputed cases can fix by his opinion the possession or property of any thing betwixt any members of the society. When a person is possess'd of any power, there is no more required to convert it into action, but the exertion of the will; and *that* in every case is consider'd as possible, and in many as probable; especially in the case of authority, where the obedience of the subject is a pleasure and advantage to the superior.

These are therefore the principles of union or cohesion among our simple ideas, and in the imagination supply the place of that inseparable connexion, by which they are united in our memory. Here is a kind of ATTRACTION, which in the mental world will be found to have as extraordinary effects as in the natural, and to shew itself in as many and as various forms. Its effects are every where conspicuous; but as to its causes, they are mostly unknown, and must be resolv'd into *original* qualities of human nature, which I pretend not to explain. Nothing is more requisite for a true philosopher, than to restrain the intemperate desire of searching into causes, and having establish'd any doctrine upon a sufficient number of experiments, rest contented with that, when he sees a farther examination would lead him into obscure and uncertain speculations. In that case his enquiry wou'd be much better employ'd in examining the effects than the causes of his principle.

Amongst the effects of this union or association of ideas, there are none more remarkable, than those complex ideas, which are the common subjects of our thoughts and reasoning, and generally arise from some principle of union among our simple ideas. These complex ideas may be divided into *Relations*, *Modes*, and *Substances*. We shall briefly examine each of these in order, and shall subjoin some considerations concerning our *general* and *particular* ideas, before we leave the present subject, which may be consider'd as the elements of this philosophy.

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SECT. V.—*Of Relations.*

The word RELATION is commonly used in two senses considerably different from each other. Either for that quality, by which two ideas are connected together in the imagination, and the one naturally introduces the other, after the manner above-explained; or for that particular circumstance, in which, even upon the arbitrary union of two ideas in the fancy, we may think proper to compare them. In common language the former is always the sense, in which we use the word, relation; and 'tis only in philosophy, that we extend it to mean any particnlar subject of comparison, without a connecting principle. Thus distance will be allowed by philosophers to be a true relation, because we acquire an idea of it by the comparing of objects: But in a common way we say, *that nothing can be more distant than such or such things from each other, nothing can have less relation;* as if distance and relation were incompatible.[1]

It may perhaps be esteemed an endless task to enumerate all those qualities, which make objects admit of comparison, and by which the ideas of *philosophical* relation are produced. But if we diligently consider them, we shall find that without difficulty they may be compriz'd under seven general heads, which may be considered as the sources of all *philosophical* relation.

1. The first is *resemblance:* And this is a relation, without which no philosophical relation can exist; since no objects will admit of comparison, but what have some degree of resemblance.[2] But tho' resemblance be necessary to all philosophical relation, it does not follow, that it always produces a connexion or association of ideas. When a quality becomes very general, and is common to a great many individuals, it leads not the mind directly to any one of them; but by presenting at once too great a choice, does thereby prevent the imagination from fixing on any single object.

2. *Identity* may be esteem'd a second species of relation. This relation I here consider as apply'd in its strictest sense to constant and unchangeable objects; without examining the nature and foundation of personal identity, which shall find

[1] *See* below, Part III. sec. 1. sub init.: and sec. 6, sub fin.: and Introd.: paragraphs 206–210, and 298.

[2] *See* Introd.: paragraph 283.

its place afterwards. Of all relations the most universal is that of identity, being common to every being whose existence has any duration.

SECT V.

Of relations.

3. After identity the most universal and comprehensive relations are those of *Space* and *Time*, which are the sources of an infinite number of comparisons, such as *distant*, *contiguous*, *above*, *below*, *before*, *after*, &c.

4. All those objects, which admit of *quantity*, or *number*, may be compar'd in that particular; which is another very fertile source of relation.

5. When any two objects possess the same *quality* in common, the *degrees*, in which they possess it, form a fifth species of relation. Thus of two objects, which are both heavy, the one may be either of greater, or less weight than the other. Two colours, that are of the same kind, may yet be of different shades, and in that respect admit of comparison.

6. The relation of *contrariety* may at first sight be regarded as an exception to the rule, *that no relation of any kind can subsist without some degree of resemblance*. But let us consider, that no two ideas are in themselves contrary, except those of existence and non-existence, which are plainly resembling, as implying both of them an idea of the object; tho' the latter excludes the object from all times and places, in which it is supposed not to exist.[1]

7. All other objects, such as fire and water, heat and cold, are only found to be contrary from experience, and from the contrariety of their *causes* or *effects;* which relation of cause and effect is a seventh philosophical relation, as well as a natural one. The resemblance implied in this relation, shall be explain'd afterwards.[2]

It might naturally be expected, that I should join *difference* to the other relations. But that I consider rather as a negation of relation, than as anything real or positive. Difference is of two kinds as oppos'd either to identity or resemblance. The first is call'd a difference of *number;* the other of *kind*.

[1] Cf. below, Part III. sec. 15. sub init., and Introd.: sec. 341, *note*.

[2] *See* below, Part III. pages 391, 410, 400, and 439.

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SECT. VI.—*Of Modes and Substances.*

I wou'd fain ask those philosophers, who found so much of their reasonings on the distinction of substance and accident, and imagine we have clear ideas of each, whether the idea of *substance* be deriv'd from the impressions of sensation or of reflection? If it be convey'd to us by our senses, I ask, which of them; and after what manner? If it be perceiv'd by the eyes, it must be a colour; if by the ears, a sound; if by the palate, a taste; and so of the other senses. But I believe none will assert, that substance is either a colour, or sound, or a taste. The idea of substance must therefore be deriv'd from an impression of reflection, if it really exist. But the impressions of reflection resolve themselves into our passions and emotions; none of which can possibly represent a substance. We have therefore no idea of substance, distinct from that of a collection of particular qualities, nor have we any other meaning when we either talk or reason concerning it.[1]

The idea of a substance as well as that of a mode, is nothing but a collection of simple ideas, that are united by the imagination, and have a particular name assigned them, by which we are able to recal, either to ourselves or others, that collection. But the difference betwixt these ideas consists in this, that the particular qualities, which form a substance, are commonly refer'd to an unknown *something*, in which they are supposed to inhere; or granting this fiction should not take place, are at least supposed to be closely and inseparably connected by the relations of contiguity and causation. The effect of this is, that whatever new simple quality we discover to have the same connexion with the rest, we immediately comprehend it among them, even tho' it did not enter into the first conception of the substance. Thus our idea of gold may at first be a yellow colour, weight, malleableness, fusibility; but upon the discovery of its dissolubility in *aqua regia*, we join that to the other qualities, and suppose it to belong to the substance as much as if its idea had from the beginning made a part of the compound one. The principal of union being regarded as the chief part of the complex idea, gives entrance to

[1] Introd.: paragraph 208.

whatever quality afterwards occurs, and is equally comprehended by it, as are the others, which first presented themselves.[1]

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Of modes and substances.

That this cannot take place in modes, is evident from considering their nature. The simple ideas of which modes are formed, either represent qualities, which are not united by contiguity and causation, but are dispers'd in different subjects; or if they be all united together, the uniting principle is not regarded as the foundation of the complex idea. The idea of a dance is an instance of the first kind of modes; that of beauty of the second. The reason is obvious, why such complex ideas cannot receive any new idea, without changing the name, which distinguishes the mode.

SECT. VII.—*Of Abstract Ideas.*

A very material question has been started concerning *abstract* or *general* ideas, *whether they be general or particular in the mind's conception of them.* A great philosopher[2] has disputed the receiv'd opinion in this particular, and has asserted, that all general ideas are nothing but particular ones, annexed to a certain term, which gives them a more extensive signification, and makes them recal upon occasion other individuals, which are similar to them. As I look upon this to be one of the greatest and most valuable discoveries that has been made of late years in the republic of letters, I shall here endeavour to confirm it by some arguments, which I hope will put it beyond all doubt and controversy.

'Tis evident, that in forming most of our general ideas, if not all of them, we abstract from every particular degree of quantity and quality, and that an object ceases not to be of any particular species on account of every small alteration in its extension, duration and other properties. It may therefore be thought, that here is a plain dilemma, that decides concerning the nature of those abstract ideas, which have afforded so much speculation to philosophers. The abstract idea of a man represents men of all sizes and all qualities; which 'tis concluded it cannot do, but either by representing

[1] Introd.: paragraph 214.

[2] Dr. Berkeley. [Introd.: to 'Principles of Human Knowledge,' secs. 18 &c. Cf. also Introd. to this volume paragraphs 183 and ff.—Ed.]

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at once all possible sizes and all possible qualities, or by representing no particular one at all. Now it having been esteemed absurd to defend the former proposition, as implying an infinite capacity in the mind, it has been commonly infer'd in favour of the latter; and our abstract ideas have been suppos'd to represent no particular degree either of quantity or quality. But that this inference is erroneous, I shall endeavour to make appear, *first*, by proving, that 'tis utterly impossible to conceive any quantity or quality, without forming a precise notion of its degrees: And *secondly* by showing, that tho' the capacity of the mind be not infinite, yet we can at once form a notion of all possible degrees of quantity and quality, in such a manner at least, as, however imperfect, may serve all the purposes of reflection and conversation.

To begin with the first proposition, *that the mind cannot form any notion of quantity or quality without forming a precise notion of degrees of each;* we may prove this by the three following arguments. First, We have observ'd, that whatever objects are different are distinguishable, and that whatever objects are distinguishable are separable by the thought and imagination.[1] And we may here add, that these propositions are equally true in the *inverse*, and that whatever objects are separable are also distinguishable, and that whatever objects are distinguishable are also different. For how is it possible we can separate what is not distinguishable, or distinguish what is not different? In order therefore to know, whether abstraction implies a separation, we need only consider it in this view, and examine, whether all the circumstances, which we abstract from in our general ideas, be such as are distinguishable and different from those, which we retain as essential parts of them. But 'tis evident at first sight, that the precise length of a line is not different nor distinguishable from the line itself: nor the precise degree of any quality from the quality. These ideas, therefore, admit no more of separation than they do of distinction and difference. They are consequently conjoined with each other in the conception; and the general idea of a line, notwithstanding all our abstractions and refinements, has in its appearance in the mind a precise degree of quantity and

[1] Introd.: paragraph 251.

quality; however it may be made to represent others, which have different degrees of both.

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Secondly, 'tis confest, that no object can appear to the senses; or in other words, that no impression can become present to the mind, without being determin'd in its degrees both of quantity[1] and quality. The confusion, in which impressions are sometimes involv'd, proceeds only from their faintness and unsteadiness, not from any capacity in the mind to receive any impression, which in its real existence has no particular degree nor proportion. That is a contradiction in terms; and even implies the flattest of all contradictions, *viz.* that 'tis possible for the same thing both to be and not to be.

Now since all ideas are deriv'd from impressions, and are nothing but copies and representations of them, whatever is true of the one must be acknowledg'd concerning the other. Impressions and ideas differ only in their strength and vivacity. The foregoing conclusion is not founded on any particular degree of vivacity. It cannot therefore be affected by any variation in that particular. An idea is a weaker impression;[2] and as a strong impression must necessarily have a determinate quantity and quality, the case must be the same with its copy or representative.

Thirdly, 'tis a principle generally receiv'd in philosophy that everything in nature is individual, and that 'tis utterly absurd to suppose a triangle really existent, which has no precise proportion of sides and angles. If this therefore be absurd in *fact and reality*, it must also be absurd *in idea;* since nothing of which we can form a clear and distinct idea is absurd and impossible. But to form the idea of an object, and to form an idea simply, is the same thing;[3] the reference of the idea to an object being an extraneous denomination, of which in itself it bears no mark or character. Now as 'tis impossible to form an idea of an object, that is possest of quantity and quality, and yet is possest of no precise degree of either; it follows that there is an equal impossibility of forming an idea, that is not limited and confin'd in both these particulars. Abstract ideas are therefore in

[1] But *see* below, page 520, 'An object may be said to be nowhere when its parts are not so situated with respect to each other as to form any figure or *quantity*.'

[2] Cf. page 375, and Introd.: paragraph 195.

[3] Cf. below, page 479, 'Our senses offer not their impression as the images of something distinct,' &c., &c.

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themselves individual, however they may become general in their representation. The mage in the mind is only that of a particular object, tho' the application of it in our reasoning be the same, as if it were universal.

This application of ideas beyond their nature proceeds from our collecting all their possible degrees of quantity and quality in such an imperfect manner as may serve the purposes of life, which is the second proposition I propos'd to explain. When we have found a resemblance[1] among several objects,[2] that often occur to us, we apply the same name to all of them, whatever differences we may observe in the degrees of their quantity and quality, and whatever other differences may appear among them. After we have acquired a custom of this kind, the hearing of that name revives the idea of one of these objects, and makes the imagination conceive it with all its particular circumstances and proportions. But as the same word is suppos'd to have been frequently applied to other individuals, that are different in many respects from that idea, which is immediately present to the mind; the word not being able to revive the idea of all these individuals, but only touches the soul, if I may be allow'd so to speak, and revives that custom, which we have acquir'd by surveying them. They are not really and in fact present to the mind, but only in power; nor do we draw them all out distinctly in the imagination, but keep ourselves in a readiness to survey any of them, as we may be prompted by a present design or necessity. The word raises up an individual idea, along with a certain custom; and that custom produces any other individual one, for which we may have occasion. But as the production of all the ideas, to

[1] The following note was added in the Appendix to the third volume of the original edition: 'Tis evident, that even different simple ideas may have a similarity or resemblance to each other; nor is it necessary, that the point or circumstance of resemblance shou'd be distinct or separable from that in which they differ. *Blue* and *green* are different simple ideas, but are more resembling than *blue* and *scarlet*; tho' their perfect simplicity excludes all possibility of separation or distinction. 'Tis the same case with particular sounds, and tastes and smells. These admit of infinite resemblances upon the general appearance and comparison, without having any common circumstance the same. And of this we may be certain, even from the very abstract terms *simple idea*. They comprehend all simple ideas under them. These resemble each other in their simplicity. And yet from their very nature, which excludes all composition, this circumstance, in which they resemble, is not distinguishable nor separable from the rest. 'Tis the same case with all the degrees in any quality. They are all resembling, and yet the quality, in any individual, is not distinct from the degree.

[2] Introd.: paragraph 213.

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which the name may be apply'd, is in most cases impossible, we abridge that work by a more partial consideration, and find but few inconveniences to arise in our reasoning from that abridgment.[1]

For this is one of the most extraordinary circumstances in the present affair, that after the mind has produc'd an individual idea, upon which we reason, the attendant custom, reviv'd by the general or abstract term, readily suggests any other individual, if by chance we form any reasoning, that agrees not with it. Thus shou'd we mention the word triangle, and form the idea of a particular equilateral one to correspond to it, and shou'd we afterwards assert, *that the three angles of a triangle are equal to each other*, the other individuals of a scalenum and isosceles, which we overlook'd at first, immediately crowd in upon us, and make us perceive the falshood of this proposition, tho' it be true with relation to that idea, which we had form'd. If the mind suggests not always these ideas upon occasion, it proceeds from some imperfection in its faculties; and such a one as is often the source of false reasoning and sophistry. But this is principally the case with those ideas which are abstruse and compounded. On other occasions the custom is more entire, and 'tis seldom we run into such errors.

Nay so entire is the custom, that the very same idea may be annext to several different words, and may be employ'd in different reasonings, without any danger of mistake. Thus the idea of an equilateral triangle of an inch perpendicular may serve us in talking of a figure, of a rectilineal figure, of a regular figure, of a triangle, and of an equilateral triangle. All these terms, therefore, are in this case attended with the same idea; but as they are wont to be apply'd in a greater or lesser compass, they excite their particular habits, and thereby keep the mind in a readiness to observe, that no conclusion be form'd contrary to any ideas, which are usually compriz'd under them.

Before those habits have become entirely perfect, perhaps the mind may not be content with forming the idea of only one individual, but may run over several, in order to make itself comprehend its own meaning, and the compass of that collection, which it intends to express by the general term. That we may fix the meaning of the word, figure, we may

[1] Introd.: paragraphs 219–222.

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revolve in our mind the ideas of circles, squares, parallelograms, triangles of different sizes and proportions, and may not rest on one image or idea. However this may be, 'tis certain *that* we form the idea of individuals, whenever we use any general term; *that* we seldom or never can exhaust these individuals; and *that* those, which remain, are only represented by means of that habit, by which we recal them, whenever any present occasion requires it. This then is the nature of our abstract ideas and general terms; and 'tis after this manner we account for the foregoing paradox, *that some ideas are particular in their nature, but general in their representation.*[1] A particular idea becomes general by being annex'd to a general term; that is, to a term, which from a customary conjunction has a relation to many other particular ideas, and readily recals them in the imagination.

The only difficulty, that can remain on this subject, must be with regard to that custom, which so readily recals every particular idea, for which we may have occasion, and is excited by any word or sound, to which we commonly annex it. The most proper method, in my opinion, of giving a satisfactory explication of this act of the mind, is by producing other instances, which are analogous to it, and other principles, which facilitate its operation. To explain the ultimate causes of our mental actions is impossible. 'Tis sufficient, if we can give any satisfactory account of them from experience and analogy.

First then I observe, that when we mention any great number, such as a thousand, the mind has generally no adequate idea of it, but only a power of producing such an idea, by its adequate idea of the decimals, under which the number is comprehended. This imperfection, however, in our ideas, is never felt in our reasonings; which seems to be an instance parallel to the present one of universal ideas.

Secondly, we have several instances of habits, which may be reviv'd by one single word; as when a person, who has by rote any periods of a discourse, or any number of verses, will be put in remembrance of the whole, which he is at a loss to recollect, by that single word or expression, with which they begin.

Thirdly, I believe every one, who examines the situation

[1] Locke, 'Essay on Human Understanding,' Book III. chap. iii. sec. 11. Cf. Introd.: paragraph 43 and ff.

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of his mind in reasoning, will agree with me, that we do not annex distinct and compleat ideas to every term we make use of, and that in talking of *government*, *church*, *negotiation*, *conquest*, we seldom spread out in our minds all the simple ideas, of which these complex ones are compos'd. 'Tis however observable, that notwithstanding this imperfection we may avoid talking nonsense on these subjects, and may perceive any repugnance among the ideas, as well as if we had a full comprehension of them. Thus if instead of saying, *that in war the weaker have always recourse to negotiation*, we shou'd say, *that they have always recourse to conquest*, the custom, which we have acquir'd of attributing certain relations to ideas, still follows the words, and makes us immediately perceive the absurdity of that proposition; in the same manner as one particular idea may serve us in reasoning concerning other ideas, however different from it in several circumstances.

Fourthly, As the individuals are collected together, and plac'd under a general term with a view to that resemblance, which they bear to each other, this relation must facilitate their entrance in the imagination, and make them be suggested more readily upon occasion. And indeed if we consider the common progress of the thought, either in reflection or conversation, we shall find great reason to be satisfy'd in this particular. Nothing is more admirable, than the readiness, with which the imagination suggests its ideas, and presents them at the very instant, in which they become necessary or useful. The fancy runs from one end of the universe to the other in collecting those ideas, which belong to any subject. One would think the whole intellectual world of ideas was at once subjected to our view, and that we did nothing but pick out such as were most proper for our purpose. There may not, however, be any present, beside those very ideas, that are thus collected by a kind of magical faculty in the soul, which, tho' it be always most perfect in the greatest geniuses, and is properly what we call a genius, is however inexplicable by the utmost efforts of human understanding.

Perhaps these four reflections may help to remove all difficulties to the hypothesis I have propos'd concerning abstract ideas, so contrary to that, which has hitherto prevail'd in philosophy. But, to tell the truth I place my

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chief confidence in what I have already prov'd concerning the impossibility of general ideas, according to the common method of explaining them. We must certainly seek some new system on this head, and there plainly is none beside what I have propos'd. If ideas be particular in their nature, and at the same time finite in their number, 'tis only by custom they can become general in their representation, and contain an infinite number of other ideas under them.

Before I leave this subject I shall employ the same principles to explain that *distinction of reason*, which is so much talk'd of, and is so little understood, in the schools. Of this kind is the distinction betwixt figure and the body figur'd; motion and the body mov'd. The difficulty of explaining this distinction arises from the principle above explain'd, *that all ideas, which are different, are separable.* For it follows from thence, that if the figure be different from the body, their ideas must be separable as well as distinguishable; if they be not different, their ideas can neither be separable nor distinguishable. What then is meant by a distinction of reason, since it implies neither a difference nor separation.

To remove this difficulty we must have recourse to the foregoing explication of abstract ideas. 'Tis certain that the mind wou'd never have dream'd of distinguishing a figure from the body figur'd, as being in reality neither distinguishable, nor different, nor separable; did it not observe, that even in this simplicity there might be contain'd many different resemblances and relations.[1] Thus when a globe of white marble is presented, we receive only the impression of a white colour dispos'd in a certain form, nor are we able to separate and distinguish the colour from the form. But observing afterwards a globe of black marble and a cube of white, and comparing them with our former object, we find two separate resemblances, in what formerly seem'd, and really is, perfectly inseparable. After a little more practice of this kind, we begin to distinguish the figure from the colour by a *distinction of reason;* that is, we consider the figure and colour together, since they are in effect the same and undistinguishable; but still view them

[1] Introd.: paragraph 219.

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in different aspects, according to the resemblances, of which they are susceptible. When we wou'd consider only the figure of the globe of white marble, we form in reality an idea both of the figure and colour, but tacitly carry our eye to its resemblance with the globe of black marble: And in the same manner, when we wou'd consider its colour only, we turn our view to its resemblance with the cube of white marble. By this means we accompany our ideas with a kind of reflection, of which custom renders us, in a great measure, insensible. A person, who desires us to consider the figure of a globe of white marble without thinking on its colour, desires an impossibility; but his meaning is, that we shou'd consider the figure and colour together, but still keep in our eye the resemblance to the globe of black marble, or that to any other globe of whatever colour or substance.

PART II.

OF THE IDEAS OF SPACE AND TIME.

SECT. I.—*Of the Infinite Divisibility of our Ideas of Space and Time.*

PART II.

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WHATEVER has the air of a paradox, and is contrary to the first and most unprejudic'd notions of mankind, is often greedily embrac'd by philosophers, as shewing the superiority of their science, which cou'd discover opinions so remote from vulgar conception. On the other hand, anything propos'd to us, which causes surprize and admiration, gives such a satisfaction to the mind, that it indulges itself in those agreeable emotions, and will never be perswaded that its pleasure is entirely without foundation. From these dispositions in philosophers and their disciples arises that mutual complaisance betwixt them; while the former furnish such plenty of strange and unaccountable opinions, and the latter so readily believe them. Of this mutual complaisance I cannot give a more evident instance than in the doctrine of infinite divisibility, with the examination of which I shall begin this subject of the ideas of space and time.

'Tis universally allow'd, that the capacity of the mind is limited, and can never attain a full and adequate conception of infinity: And tho' it were not allow'd, 'twould be sufficiently evident from the plainest observation and experience.[1] 'Tis also obvious, that whatever is capable of being divided *in infinitum*, must consist of an infinite number of parts, and that 'tis impossible to set any bounds to the number of parts, without setting bounds at the same time to the division. It requires scarce any induction to conclude from hence, that the *idea*, which we form of any finite quality, is not infinitely divisible, but that by proper distinctions and

[1] Introd.: paragraph 268.

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separations we may run up this idea to inferior ones, which will be perfectly simple and indivisible. In rejecting the infinite capacity of the mind, we suppose it may arrive at an end in the division of its ideas; nor are there any possible means of evading the evidence of this conclusion.

'Tis therefore certain, that the imagination reaches a *minimum*, and may raise up to itself an idea, of which it cannot conceive any sub-division, and which cannot be diminished without a total annihilation. When you tell me of the thousandth and ten thousandth part of a grain of sand, I have a distinct idea of these numbers and of their different proportions; but the images, which I form in my mind to represent the things themselves, are nothing different from each other, nor inferior to that image, by which I represent the grain of sand itself, which is suppos'd so vastly to exceed them. What consists of parts is distinguishable into them, and what is distinguishable is separable. But whatever we may imagine of the thing, the idea of a grain of sand is not distinguishable, nor separable into twenty, much less into a thousand, ten thousand, or an infinite number of different ideas.[1]

'Tis the same case with the impressions of the senses as with the ideas of the imagination. Put a spot of ink upon paper, fix your eye upon that spot, and retire to such a distance, that at last you lose sight of it; 'tis plain, that the moment before it vanish'd the image or impression was perfectly indivisible. 'Tis not for want of rays of light striking on our eyes, that the minute parts of distant bodies convey not any sensible impression; but because they are remov'd beyond that distance, at which their impressions were reduc'd to a *minimum*, and were incapable of any farther diminution. A microscope or telescope, which renders them visible, produces not any new rays of light, but only spreads those, which always flow'd from them; and by that means both gives parts to impressions, which to the naked eye appear simple and uncompounded, and advances to a *minimum*, what was formerly imperceptible.

We may hence discover the error of the common opinion, that the capacity of the mind is limited on both sides, and that 'tis impossible for the imagination to form an adequate

[1] Introd.: paragraph 266 and ff.

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idea, of what goes beyond a certain degree of minuteness as well as of greatness. Nothing can be more minute, than some ideas, which we form in the fancy; and images, which appear to the senses; since there are ideas and images perfectly simple and indivisible. The only defect of our senses is, that they give us disproportion'd images of things, and represent as minute and uncompounded what is really great and compos'd of a vast number of parts. This mistake we are not sensible of; but taking the impressions of those minute objects, which appear to the senses, to be equal or nearly equal to the objects, and finding by reason, that there are other objects vastly more minute, we too hastily conclude, that these are inferior to any idea of our imagination or impression of our senses. This however is certain, that we can form ideas, which shall be no greater than the smallest atom of the animal spirits of an insect a thousand times less than a mite: And we ought rather to conclude, that the difficulty lies in enlarging our conceptions so much as to form a just notion of a mite, or even of an insect a thousand times less than a mite. For in order to form a just notion of these animals, we must have a distinct idea representing every part of them; which, according to the system of infinite divisibility, is utterly impossible, and according to that of indivisible parts or atoms, is extremely difficult, by reason of the vast number and multiplicity of these parts.

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Wherever ideas are adequate representations of objects, the relations, contradictions and agreements of the ideas are all applicable to the objects; and this we may in general observe to be the foundation of all human knowledge. But our ideas are adequate representations of the most minute parts of extension; and thro' whatever divisions and subdivisions we may suppose these parts to be arriv'd at, they can never become inferior to some ideas, which we form. The plain consequence is, that whatever *appears* impossible and contradictory upon the comparison of these ideas, must be *really* impossible and contradictory, without any farther excuse or evasion.

Everything capable of being infinitely divided contains

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an infinite number of parts; otherwise the division would be stopt short by the indivisible parts, which we should immediately arrive at. If therefore any finite extension be infinitely divisible, it can be no contradiction to suppose, that a finite extension contains an infinite number of parts: And *vice versa*, if it be a contradiction to suppose, that a finite extension contains an infinite number of parts, no finite extension can be infinitely divisible. But that this latter supposition is absurd, I easily convince myself by the consideration of my clear ideas. I first take the least idea I can form of a part of extension, and being certain that there is nothing more minute than this idea, I conclude, that whatever I discover by its means must be a real quality of extension. I then repeat this idea once, twice, thrice, &c., and find the compound idea of extension, arising from its repetition, always to augment, and become double, triple, quadruple, &c., till at last it swells up to a considerable bulk, greater or smaller, in proportion as I repeat more or less the same idea. When I stop in the addition of parts, the idea of extension ceases to augment; and were I to carry on the addition *in infinitum*, I clearly perceive, that the idea of extension must also become infinite. Upon the whole, I conclude, that the idea of an infinite number of parts is individually the same idea with that of an infinite extension; that no finite extension is capable of containing an infinite number of parts; and consequently that no finite extension is infinitely divisible.[1]

I may subjoin another argument propos'd by a noted author,[2] which seems to me very strong and beautiful. 'Tis evident, that existence in itself belongs only to unity, and is never applicable to number, but on account of the unites, of which the number is compos'd.[3] Twenty men may be said to exist; but 'tis only because one, two, three, four, &c. are existent, and if you deny the existence of the latter, that of the former falls of course. 'Tis therefore utterly absurd to suppose any number to exist, and yet deny the existence of

[1] It has been objected to me, that infinite divisibility supposes only an infinite number of *proportional*, not of *aliquot* parts, and that an infinite number of proportional parts does not form an infinite extension. But this distinction is entirely frivolous. Whether these parts be called *aliquot* or *proportional*, they cannot be inferior to those minute parts we conceive; and, therefore cannot form a less extension by their conjunction.

[2] Mons. *Malezieu.* [*Élémens de Géométrie de M. le duc de Bourgogne.*—Ed.]

[3] Introd.: paragraph 258.—Ed.

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unites; and as extension is always a number, according to the common sentiment of metaphysicians, and never resolves itself into any unite or indivisible quantity, it follows, that extension can never at all exist. 'Tis in vain to reply, that any determinate quantity of extension is an unite; but such-a-one as admits of an infinite number of fractions, and is inexhaustible in its sub-divisions. For by the same rule these twenty men *may be consider'd as an unite*. The whole globe of the earth, nay the whole universe, *may be consider'd as an unite*. That term of unity is merely a fictitious denomination, which the mind may apply to any quantity of objects it collects together; nor can such an unity any more exist alone than number can, as being in reality a true number. But the unity, which can exist alone, and whose existence is necessary to that of all number, is of another kind, and must be perfectly indivisible, and incapable of being resolved into any lesser unity.[1]

All this reasoning takes place with regard to time; along with an additional argument, which it may be proper to take notice of. 'Tis a property inseparable from time, and which in a manner constitutes its essence, that each of its parts succeeds another, and that none of them, however contiguous, can ever be co-existent. For the same reason, that the year 1737 cannot concur with the present year 1738 every moment must be distinct from, and posterior or antecedent to another.[2] 'Tis certain then, that time, as it exists, must be compos'd of indivisible moments. For if in time we could never arrive at an end of division, and if each moment, as it succeeds another, were not perfectly single and indivisible, there would be an infinite number of co-existent moments, or parts of time; which I believe will be allow'd to be an arrant contradiction.

The infinite divisibility of space implies that of time, as is evident from the nature of motion. If the latter, therefore, be impossible, the former must be equally so.

I doubt not but it will readily be allow'd by the most obstinate defender of the doctrine of infinite divisibility, that these arguments are difficulties, and that 'tis impossible to give any answer to them which will be perfectly clear and satisfactory. But here we may observe, that nothing can be more

[1] Introd.: paragraph 258 and the following.
[2] Introd.: paragraph 259.

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absurd, than this custom of calling a *difficulty* what pretends to be a *demonstration*, and endeavouring by that means to elude its force and evidence. 'Tis not in demonstrations as in probabilities, that difficulties can take place, and one argument counter-ballance another, and diminish its authority. A demonstration, if just, admits of no opposite difficulty; and if not just, 'tis a mere sophism, and consequently can never be a difficulty. 'Tis either irresistible, or has no manner of force. To talk therefore of objections and replies, and ballancing of arguments in such a question as this, is to confess, either that human reason is nothing but a play of words, or that the person himself, who talks so, has not a capacity equal to such subjects. Demonstrations may be difficult to be comprehended, because of abstractedness of the subject; but can never have such difficulties as will weaken their authority, when once they are comprehended.

'Tis true, mathematicians are wont to say, that there are here equally strong arguments on the other side of the question, and that the doctrine of indivisible points is also liable to unanswerable objections. Before I examine these arguments and objections in detail, I will here take them in a body, and endeavour by a short and decisive reason to prove at once, that 'tis utterly impossible they can have any just foundation.

'Tis an establish'd maxim in metaphysics, *That whatever the mind clearly conceives, includes the idea of possible existence*, or in other words, *that nothing we imagine is absolutely impossible.* We can form the idea of a golden mountain, and from thence conclude that such a mountain may actually exist. We can form no idea of a mountain without a valley, and therefore regard it as impossible.

Now 'tis certain we have an idea of extension; for otherwise why do we talk and reason concerning it?[1] 'Tis likewise certain that this idea, as conceiv'd by the imagination, tho' divisible into parts or inferior ideas, is not infinitely divisible, nor consists of an infinite number of parts: For that exceeds the comprehension of our limited capacities. Here then is an idea of extension, which consists of parts or inferior ideas, that are perfectly indivisible: consequently this idea implies no contradiction: consequently 'tis possible for exten-

[1] So says Locke of the idea of vacuum. *See* his Essay, Book II. chap. xiii. secs. 22 & 24. For a contrary view in Hume, *see* below, pages 359 & 369.—Ed.

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sion really to exist conformable to it: and consequently all the arguments employ'd against the possibility of mathematical points are mere scholastick quibbles, and unworthy of our attention.

These consequences we may carry one step farther, and conclude that all the pretended demonstrations for the infinite divisibility of extension are equally sophistical; since 'tis certain these demonstrations cannot be just without proving the impossibility of mathematical points; which 'tis an evident absurdity to pretend to.

SECT. III.—*Of the other Qualities of our Ideas of Space and Time.*

No discovery cou'd have been made more happily for deciding all controversies concerning ideas, than that above-mention'd, that impressions always take the precedency of them, and that every idea, with which the imagination is furnish'd, first makes its appearance in a correspondent impression. These latter perceptions are all so clear and evident, that they admit of no controversy; tho' many of our ideas are so obscure, that 'tis almost impossible even for the mind, which forms them, to tell exactly their nature and composition. Let us apply this principle, in order to discover farther the nature of our ideas of space and time.

Upon opening my eyes, and turning them to the surrounding objects, I perceive many visible bodies; and upon shutting them again, and considering the distance betwixt these bodies, I acquire the idea of extension. As every idea is deriv'd from some impression, which is exactly similar to it, the impressions similar to this idea of extension, must either be some sensations deriv'd from the sight, or some internal impressions arising from these sensations.[1]

Our internal impressions are our passions, emotions, desires and aversions; none of which, I believe, will ever be asserted to be the model, from which the idea of space is deriv'd. There remains therefore nothing but the senses, which can convey to us this original impression. Now what impression do our senses here convey to us? This is the

[1] *See* below, page 519. ('The first notion of space,' &c.), and Introd.: paragraphs 234 and 245.—Ed.

principal question, and decides without appeal concerning the nature of the idea.

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The table before me is alone sufficient by its view to give me the idea of extension. This idea, then, is borrow'd from, and represents some impression, which this moment appears to the senses. But my senses convey to me only the impressions of colour'd points, dispos'd in a certain manner. If the eye is sensible of any thing farther, I desire it may be pointed out to me. But if it be impossible to shew any thing farther, we may conclude with certainty, that the idea of extension is nothing but a copy of these colour'd points, and of the manner of their appearance.

Suppose that in the extended object, or composition of colour'd points, from which we first receiv'd the idea of extension, the points were of a purple colour; it follows, that in every repetition of that idea we wou'd not only place the points in the same order with respect to each other, but also bestow on them that precise colour, with which alone we are acquainted. But afterwards having experience of the other colours of violet, green, red, white, black, and of all the different compositions of these, and finding a resemblance in the disposition of colour'd points, of which they are compos'd, we omit the peculiarities of colour, as far as possible, and found an abstract idea merely on that disposition of points, or manner of appearance, in which they agree. Nay even when the resemblance is carry'd beyond the objects of one sense, and the impressions of touch are found to be similar to those of sight in the disposition of their parts; this does not hinder the abstract idea from representing both, upon account of their resemblance. All abstract ideas are really nothing but particular ones, consider'd in a certain light; but being annexed to general terms, they are able to represent a vast variety, and to comprehend objects, which, as they are alike in some particulars, are in others vastly wide of each other.[1]

The idea of time, being deriv'd from the succession of our perceptions of every kind, ideas as well as impressions, and impressions of reflection as well as of sensation, will afford us an instance of an abstract idea, which comprehends a still greater variety than that of space, and yet is repre-

[1] *See* above, page 28, and Introd.: paragraph 250.—Ed.

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sented in the fancy by some particular individual idea of a determinate quantity and quality.

As 'tis from the disposition of visible and tangible objects we receive the idea of space, so from the succession of ideas and impressions we form the idea of time, nor is it possible for time alone ever to make its appearance, or be taken notice of by the mind.[1] A man in a sound sleep, or strongly occupy'd with one thought, is insensible of time; and according as his perceptions succeed each other with greater or less rapidity, the same duration appears longer or shorter to his imagination. It has been remark'd by a great philosopher,[2] that our perceptions have certain bounds in this particular, which are fix'd by the original nature and constitution of the mind, and beyond which no influence of external objects on the senses is ever able to hasten or retard our thought. If you wheel about a burning coal with rapidity, it will present to the senses an image of a circle of fire; nor will there seem to be any interval of time betwixt its revolutions; meerly because 'tis impossible for our perceptions to succeed each other with the same rapidity, that motion may be communicated to external objects. Wherever we have no successive perceptions, we have no notion of time, even tho' there be a real succession in the objects.[3] From these phænomena, as well as from many others, we may conclude, that time cannot make its appearance to the mind, either alone, or attended with a steady unchangeable object, but is always discover'd by some *perceivable* succession of changeable objects.

To confirm this we may add the following argument, which to me seems perfectly decisive and convincing. 'Tis evident, that time or duration consists of different parts: For otherwise we cou'd not conceive a longer or shorter duration. 'Tis also evident, that these parts are not co-existent: For that quality of the co-existence of parts belongs to extension, and is what distinguishes it from duration. Now as time is compos'd of parts, that are not co-existent; an unchangeable object, since it produces none but co-existent impressions, produces none that can give us the idea of time; and consequently that idea must be deriv'd from a succession of

[1] *See* Introd.: paragraphs 247 and 248.—Ed.

[2] Mr. *Locke*. [Essay II. chap. xiv. sec. 9.—Ed.]

[3] *See* Introd.: 303.

changeable objects, and time in its first appearance can never be sever'd from such a succession.

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Having therefore found, that time in its first appearance to the mind is always conjoin'd with a succession of changeable objects, and that otherwise it can never fall under our notice, we must now examine whether it can be *conceiv'd* without our conceiving any succession of objects, and whether it can alone form a distinct idea in the imagination.

In order to know whether any objects, which are join'd in impression, be inseparable in idea, we need only consider, if they be different from each other; in which case, 'tis plain they may be conceiv'd apart. Every thing, that is different is distinguishable: and every thing, that is distinguishable, may be separated, according to the maxims above-explain'd. If on the contrary they be not different, they are not distinguishable; and if they be not distinguishable, they cannot be separated. But this is precisely the case with respect to time, compar'd with our successive perceptions. The idea of time is not deriv'd from a particular impression mix'd up with others, and plainly distinguishable from them; but arises altogether from the manner, in which impressions appear to the mind, without making one of the number. Five notes play'd on a flute give us the impression and idea of time; tho' time be not a sixth impression, which presents itself to the hearing or any other of the senses. Nor is it a sixth impression, which the mind by reflection finds in itself. These five sounds making their appearance in this particular manner, excite no emotion in the mind, nor produce an affection of any kind, which being observ'd by it can give rise to a new idea. For *that* is necessary to produce a new idea of reflection, nor can the mind, by revolving over a thousand times all its ideas of sensation, ever extract from them any new original idea, unless nature has so fram'd its faculties, that it feels some new original impression arise from such a contemplation. But here it only takes notice of the *manner*, in which the different sounds make their appearance; and that it may afterwards consider without considering these particular sounds, but may conjoin it with any other objects. The ideas of some objects it certainly must have, nor is it possible for it without these ideas ever to arrive at any conception of time; which since it appears not as any

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primary distinct impression, can plainly be nothing but different ideas, or impressions, or objects dispos'd in a certain manner, that is, succeeding each other.[1]

I know there are some who pretend, that the idea of duration is applicable in a proper sense to objects, which are perfectly unchangeable; and this I take to be the common opinion of philosophers as well as of the vulgar. But to be convinc'd of its falsehood we need but reflect on the foregoing conclusion, that the idea of duration is always deriv'd from a succession of changeable objects, and can never be convey'd to the mind by any thing stedfast and unchangeable. For it inevitably follows from thence, that since the idea of duration cannot be deriv'd from such an object, it can never in any propriety or exactness be apply'd to it, nor can any thing unchangeable be ever said to have duration. Ideas always represent the objects or impressions, from which they are deriv'd, and can never without a fiction represent or be apply'd to any other. By what fiction we apply the idea of time, even to what is unchangeable, and suppose, as is common, that duration is a measure of rest as well as of motion, we shall consider afterwards.[2]

There is another very decisive argument, which establishes the present doctrine concerning our ideas of space and time, and is founded only on that simple principle, *that our ideas of them are compounded of parts, which are indivisible.* This argument may be worth the examining.

Every idea, that is distinguishable, being also separable, let us take one of those simple indivisible ideas, of which the compound one of *extension* is form'd, and separating it from all others, and considering it apart, let us form a judgment of its nature and qualities.

'Tis plain it is not the idea of extension. For the idea of extension consists of parts; and this idea, according to the supposition, is perfectly simple and indivisible. Is it therefore nothing? That is absolutely impossible. For as the compound idea of extension, which is real, is compos'd of such ideas; were these so many non-entities, there wou'd be a real existence compos'd of non-entities; which is absurd. Here therefore I must ask, *What is our idea of a simple and indivisible point?* No wonder if my answer appear somewhat new, since the question itself has scarce ever yet

[1] *See* Introd.: paragraph 261 and the following.—Ed. [2] Sect. 5.

been thought of. We are wont to dispute concerning the nature of mathematical points, but seldom concerning the nature of their ideas.

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The idea of space is convey'd to the mind by two senses, the sight and touch; nor does anything ever appear extended, that is not either visible or tangible. That compound impression, which represents extension, consists of several lesser impressions, that are indivisible to the eye or feeling, and may be call'd impressions of atoms or corpuscles endow'd with colour and solidity. But this is not all. 'Tis not only requisite, that these atoms shou'd be colour'd or tangible, in order to discover themselves to our senses; 'tis also necessary we shou'd preserve the idea of their colour or tangibility in order to comprehend them by our imagination. There is nothing but the idea of their colour or tangibility, which can render them conceivable by the mind. Upon the removal of the ideas of these sensible qualities, they are utterly annihilated to the thought or imagination.[1]

Now such as the parts are, such is the whole. If a point be not consider'd as colour'd or tangible, it can convey to us no idea; and consequently the idea of extension, which is compos'd of the ideas of these points, can never possibly exist. But if the idea of extension really can exist, as we are conscious it does, its parts must also exist; and in order to that, must be consider'd as colour'd or tangible. We have therefore no idea of space or extension, but when we regard it as an object either of our sight or feeling.

The same reasoning will prove, that the indivisible moments of time must be fill'd with some real object or existence, whose succession forms the duration, and makes it be conceivable by the mind.

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Our system concerning space and time consists of two parts, which are intimately connected together. The first depends on this chain of reasoning. The capacity of the mind is not infinite; consequently no idea of extension or duration consists of an infinite number of parts or inferior ideas, but of a finite number, and these simple and indivisible: 'Tis therefore possible for space and time to exist

[1] *See* below, pages 513 and ff., and Introd.: paragraphs 246 and 270.—Ed.

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conformable to this idea: And if it be possible, 'tis certain they actually do exist conformable to it; since their infinite divisibility is utterly impossible and contradictory.

The other part of our system is a consequence of this. The parts, into which the ideas of space and time resolve themselves, become at last indivisible; and these indivisible parts, being nothing in themselves, are inconceivable when not fill'd with something real and existent. The ideas of space and time are therefore no separate or distinct ideas, but merely those of the manner or order, in which objects exist:[1] Or, in other words, 'tis impossible to conceive either a vacuum and extension without matter, or a time, when there was no succession or change in any real existence. The intimate connexion betwixt these parts of our system is the reason why we shall examine together the objections, which have been urg'd against both of them, beginning with those against the finite divisibility of extension.

I. The first of these objections, which I shall take notice of, is more proper to prove this connexion and dependance of the one part upon the other, than to destroy either of them. It has often been maintain'd in the schools, that extension must be divisible, *in infinitum*, because the system of mathematical points is absurd; and that system is absurd, because a mathematical point is a non-entity, and consequently can never by its conjunction with others form a real existence. This wou'd be perfectly decisive, were there no medium betwixt the infinite divisibility of matter, and the non-entity of mathematical points. But there is evidently a medium, *viz.* the bestowing a colour or solidity on these points; and the absurdity of both the extremes is a demonstration of the truth and reality of this medium. The system of *physical* points, which is another medium, is too absurd to need a refutation. A real extension, such as a physical point is suppos'd to be, can never exist without parts, different from each other; and wherever objects are different, they are distinguishable and separable by the imagination.

II. The second objection is deriv'd from the necessity there wou'd be of *penetration*, if extension consisted of mathematical points. A simple and indivisible atom, that touches another, must necessarily penetrate it; for 'tis impossible it can touch it by its external parts, from the very supposition

[1] *See* Introd.: paragraph 251.—Ed.

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of its perfect simplicity, which excludes all parts. It must therefore touch it intimately, and in its whole essence, *secundum se, tota, & totaliter;* which is the very definition of penetration. But penetration is impossible: Mathematical points are of consequence equally impossible.

I answer this objection by substituting a juster idea of penetration. Suppose two bodies containing no void within their circumference, to approach each other, and to unite in such a manner that the body, which results from their union, is no more extended than either of them; 'tis this we must mean when we talk of penetration. But 'tis evident this penetration is nothing but the annihilation of one of these bodies, and the preservation of the other, without our being able to distinguish particularly which is preserv'd and which annihilated. Before the approach we have the idea of two bodies. After it we have the idea only of one. 'Tis impossible for the mind to preserve any notion of difference betwixt two bodies of the same nature existing in the same place at the same time.

Taking then penetration in this sense, for the annihilation of one body upon its approach to another, I ask any one, if he sees a necessity, that a colour'd or tangible point shou'd be annihilated upon the approach of another colour'd or tangible point? On the contrary, does he not evidently perceive, that from the union of these points there results an object, which is compounded and divisible, and may be distinguish'd into two parts, of which each preserves its existence distinct and separate, notwithstanding its contiguity to the other? Let him aid his fancy by conceiving these points to be of different colours, the better to prevent their coalition and confusion. A blue and a red point may surely lie contiguous without any penetration or annihilation. For if they cannot, what possibly can become of them? Whether shall the red or the blue be annihilated? Or if these colours unite into one, what new colour will they produce by their union?

What chiefly gives rise to these objections, and at the same time renders it so difficult to give a satisfactory answer to them, is the natural infirmity and unsteadiness both of our imagination and senses, when employ'd on such minute objects. Put a spot of ink upon paper, and retire to such a distance, that the spot becomes altogether invisible; you will

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find, that upon your return and nearer approach the spot first becomes visible by short intervals; and afterwards becomes always visible; and afterwards acquires only a new force in its colouring without augmenting its bulk; and afterwards, when it has encreas'd to such a degree as to be really extended, 'tis still difficult for the imagination to break it into its component parts, because of the uneasiness it finds in the conception of such a minute object as a single point. This infirmity affects most of our reasonings on the present subject, and makes it almost impossible to answer in an intelligible manner, and in proper expressions, many questions which may arise concerning it.

III. There have been many objections drawn from the *mathematics* against the indivisibility of the parts of extension; tho' at first sight that science seems rather favourable to the present doctrine; and if it be contrary in its *demonstrations*, 'tis perfectly conformable in its *definitions*. My present business then must be to defend the definitions, and refute the demonstrations.

A surface is *defin'd* to be length and breadth without depth: A line to be length without breadth or depth: A point to be what has neither length, breadth nor depth. 'Tis evident that all this is perfectly unintelligible upon any other supposition than that of the composition of extension by indivisible points or atoms. How else cou'd anything exist without length, without breadth, or without depth?

Two different answers, I find, have been made to this argument; neither of which is in my opinion satisfactory. The first is, that the objects of geometry, those surfaces, lines and points, whose proportions and positions it examines, are mere ideas in the mind;[1] and not only never did, but never can exist in nature. They never did exist; for no one will pretend to draw a line or make a surface entirely conformable to the definition: They never can exist; for we may produce demonstrations from these very ideas to prove, that they are impossible.

But can anything be imagin'd more absurd and contradictory than this reasoning? Whatever can be conceiv'd by a clear and distinct idea necessarily implies the possibility of existence; and he who pretends to prove the impossibility of its existence by any argument derived from the clear

[1] Cf. Locke, Book IV. chap. vi. sec. 6.—Ed.

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idea, in reality asserts, that we have no clear idea of it, because we have a clear idea. 'Tis in vain to search for a contradiction in anything that is distinctly conceiv'd by the mind. Did it imply any contradiction, 'tis impossible it cou'd ever be conceiv'd.

There is therefore no medium betwixt allowing at least the possibility of indivisible points, and denying their idea; and 'tis on this latter principle, that the second answer to the foregoing argument is founded. It has been[1] pretended, that tho' it be impossible to conceive a length without any breadth, yet by an abstraction without a separation, we can consider the one without regarding the other; in the same manner as we may think of the length of the way betwixt two towns, and overlook its breadth. The length is inseparable from the breadth both in nature and in our minds; but this excludes not a partial consideration, and a *distinction of reason*, after the manner above explain'd.[2]

In refuting this answer I shall not insist on the argument, which I have already sufficiently explained, that if it be impossible for the mind to arrive at a *minimum* in its ideas, its capacity must be infinite, in order to comprehend the infinite number of parts, of which its idea of any extension wou'd be compos'd. I shall here endeavour to find some new absurdities in this reasoning.

A surface terminates a solid; a line terminates a surface; a point terminates a line; but I assert, that if the *ideas* of a point, line or surface were not indivisible, 'tis impossible we shou'd ever conceive these terminations: For let these ideas be suppos'd infinitely divisible; and then let the fancy endeavour to fix itself on the idea of the last surface, line or point; it immediately finds this idea to break into parts; and upon its seizing the last of these parts, it loses its hold by a new division, and so on *in infinitum*, without any possibility of its arriving at a concluding idea.[3] The number of fractions bring it no nearer the last division, than the first idea it form'd. Every particle eludes the grasp by a new fraction; like quicksilver, when we endeavour to seize it. But as in fact there must be something, which terminates the idea of every finite quantity; and as this terminating

[1] *L'Art de penser*. [1 Part. chap. iv.—Ed.]

[2] Cf. Locke, Book II. chap. xiii. sec. 13, and above, page 332.—Ed.

[3] *See* Introd.: paragraph 272, and Cf. Aristotle, Topics 141. b. 20, Metaph. 1028. b. 15.—Ed.

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idea cannot itself consist of parts or inferior ideas; otherwise it wou'd be the last of its parts, which finish'd the idea, and so on; this is a clear proof, that the ideas of surfaces, lines and points admit not of any division; those of surfaces in depth; of lines in breadth and depth; and of points in any dimension.

The *schoolmen* were so sensible of the force of this argument, that some of them maintain'd, that nature has mix'd among those particles of matter, which are divisible *in infinitum*, a number of mathematical points, in order to give a termination to bodies; and others eluded the force of this reasoning by a heap of unintelligible cavils and distinctions. Both these adversaries equally yield the victory. A man who hides himself, confesses as evidently the superiority of his enemy, as another, who fairly delivers his arms.

Thus it appears, that the definitions of mathematics destroy the pretended demonstrations; and that if we have the idea of indivisible points, lines and surfaces conformable to the definition, their existence is certainly possible: but if we have no such idea, 'tis impossible we can ever conceive the termination of any figure; without which conception there can be no geometrical demonstration.

But I go farther, and maintain, that none of these demonstrations can have sufficient weight to establish such a principle, as this of infinite divisibility; and that because with regard to such minute objects, they are not properly demonstrations, being built on ideas, which are not exact, and maxims, which are not precisely true. When geometry decides anything concerning the proportions of quantity, we ought not to look for the utmost *precision* and exactness. None of its proofs extend so far. It takes the dimensions and proportions of figures justly; but roughly, and with some liberty. Its errors are never considerable; nor wou'd it err at all, did it not aspire to such an absolute perfection.

I first ask mathematicians, what they mean when they say one line or surface is EQUAL to, or GREATER or LESS than another? Let any of them give an answer, to whatever sect he belongs, and whether he maintains the composition of extension by indivisible points, or by quantities divisible *in infinitum*. This question will embarrass both of them.[1]

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There are few or no mathematicians, who defend the hypothesis of indivisible points; and yet these have the readiest and justest answer to the present question. They need only reply, that lines or surfaces are equal, when the numbers of points in each are equal; and that as the proportion of the numbers varies, the proportion of the lines and surfaces is also vary'd. But tho' this answer be *just*, as well as obvious; yet I may affirm, that this standard of equality is entirely *useless*, and that it never is from such a comparison we determine objects to be equal or unequal with respect to each other. For as the points, which enter into the composition of any line or surface, whether perceiv'd by the sight or touch, are so minute and so confounded with each other, that 'tis utterly impossible for the mind to compute their number, such a computation will never afford us a standard by which we may judge of proportions. No one will ever be able to determine by an exact numeration, that an inch has fewer points than a foot, or a foot fewer than an ell or any greater measure; for which reason we seldom or never consider this as the standard of equality or inequality.

As to those, who imagine, that extension is divisible *in infinitum*, 'tis impossible they can make use of this answer, or fix the equality of any line or surface by a numeration of its component parts. For since, according to their hypothesis, the least as well as greatest figures contain an infinite number of parts; and since infinite numbers, properly speaking, can neither be equal nor unequal with respect to each other; the equality or inequality of any portions of space can never depend on any proportion in the number of their parts. 'Tis true, it may be said, that the inequality of an ell and a yard consists in the different numbers of the feet, of which they are compos'd; and that of a foot and a yard in the number of the inches. But as that quantity we call an inch in the one is suppos'd equal to what we call an inch in the other, and as 'tis impossible for the mind to find this equality by proceeding *in infinitum* with these references to inferior quantities; 'tis evident, that at last we must fix some standard of equality different from an enumeration of the parts.

There are some[1], who pretend, that equality is best defin'd

[1] See Dr. *Barrow's* mathematical lectures. [Lect. IX. in Whewell's edition.—Ed.]

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by *congruity*, and that any two figures are equal, when upon the placing of one upon the other, all their parts correspond to and touch each other. In order to judge of this definition let us consider, that since equality is a relation, it is not, strictly speaking, a property in the figures themselves, but arises merely from the comparison, which the mind makes betwixt them.[1] If it consists, therefore, in this imaginary application and mutual contact of parts, we must at least have a distinct notion of these parts, and must conceive their contact. Now 'tis plain, that in this conception we wou'd run up these parts to the greatest minuteness, which can possibly be conceiv'd; since the contact of large parts wou'd never render the figures equal. But the minutest parts we can conceive are mathematical points; and consequently this standard of equality is the same with that deriv'd from the equality of the number of points; which we have already determin'd to be a just but an useless standard. We must therefore look to some other quarter for a solution of the present difficulty.

There [2] are many philosophers, who refuse to assign any standard of *equality*, but assert, that 'tis sufficient to present two objects, that are equal, in order to give us a just notion of this proportion. All definitions, say they, are fruitless, without the perception of such objects; and where we perceive such objects, we no longer stand in need of any definition. To this reasoning, I entirely agree; and assert, that the only useful notion of equality, or inequality, is deriv'd from the whole united appearance and the comparison of particular objects.

'Tis evident, that the eye, or rather the mind is often able at one view to determine the proportions of bodies, and pronounce them equal to, or greater or less than each other, without examining or comparing the number of their minute parts. Such judgments are not only common, but in many cases certain and infallible. When the measure of a yard and that of a foot are presented, the mind can no more question, that the first is longer than the second, than it can doubt of those principles, which are the most clear and self-evident.

There are therefore three proportions, which the mind distinguishes in the general appearance of its objects, and calls by the names of *greater*, *less* and *equal*. But tho' its

[1] Cf. page 372.—Ed.

[2] This paragraph was added in the Appendix.

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decisions concerning these proportions be sometimes infallible, they are not always so; nor are our judgments of this kind more exempt from doubt and error than those on any other subject. We frequently correct our first opinion by a review and reflection; and pronounce those objects to be equal, which at first we esteem'd unequal; and regard an object as less, tho' before it appear'd greater than another. Nor is this the only correction, which these judgments of our senses undergo; but we often discover our error by a juxta-position of the objects; or where that is impracticable, by the use of some common and invariable measure, which being successively apply'd to each, informs us of their different proportions. And even this correction is susceptible of a new correction, and of different degrees of exactness, according to the nature of the instrument, by which we measure the bodies, and the care which we employ in the comparison.[1]

When therefore the mind is accustom'd to these judgments and their corrections, and finds that the same proportion which makes two figures have in the eye that appearance, which we call *equality*, makes them also correspond to each other, and to any common measure, with which they are compar'd, we form a mix'd notion of equality deriv'd both from the looser and stricter methods of comparison. But we are not content with this. For as sound reason convinces us that there are bodies *vastly* more minute than those, which appear to the senses; and as a false reason wou'd perswade us, that there are bodies *infinitely* more minute; we clearly perceive, that we are not possess'd of any instrument or art of measuring, which can secure us from all error and uncertainty. We are sensible, that the addition or removal of one of these minute parts, is not discernible either in the appearance or measuring; and as we imagine, that two figures, which were equal before, cannot be equal after this removal or addition, we therefore suppose some imaginary standard of equality, by which the appearances and measuring are exactly corrected, and the figures reduc'd entirely to that proportion. This standard is plainly imaginary. For as the very idea of equality is that of such a particular appearance corrected by juxta-position or a common measure, the notion of any correction beyond what we have instruments and art to make, is a mere fiction of the mind, and useless

[1] Introd.: paragraphs 274 and 275.—Ed.

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as well as incomprehensible. But tho' this standard be only imaginary, the fiction however is very natural; nor is anything more usual, than for the mind to proceed after this manner with any action, even after the reason has ceas'd, which first determin'd it to begin. This appears very conspicuously with regard to time; where tho' 'tis evident we have no exact method of determining the proportions of parts, not even so exact as in extension, yet the various corrections of our measures, and their different degrees of exactness, have given us an obscure and implicit notion of a perfect and entire equality. The case is the same in many other subjects. A musician finding his ear becoming every day more delicate, and correcting himself by reflection and attention, proceeds with the same act of the mind, even when the subject fails him, and entertains a notion of a compleat *tierce* or *octave*, without being able to tell whence he derives his standard. A painter forms the same fiction with regard to colours. A mechanic with regard to motion. To the one *light* and *shade*; to the other *swift* and *slow* are imagin'd to be capable of an exact comparison and equality beyond the judgments of the senses.

We may apply the same reasoning to CURVE and RIGHT lines. Nothing is more apparent to the senses, than the distinction betwixt a curve and a right line; nor are there any ideas we more easily form than the ideas of these objects. But however easily we may form these ideas, 'tis impossible to produce any definition of them, which will fix the precise boundaries betwixt them. When we draw lines upon paper or any continu'd surface, there is a certain order, by which the lines run along from one point to another, that they may produce the entire impression of a curve or right line; but this order is perfectly unknown, and nothing is observ'd but the united appearance. Thus even upon the system of indivisible points, we can only form a distant notion of some unknown standard to these objects. Upon that of infinite divisibility we cannot go even this length; but are reduc'd meerly to the general appearance, as the rule by which we determine lines to be either curve or right ones. But tho' we can give no perfect definition of these lines, nor produce any very exact method of distinguishing the one from the other; yet this hinders us not from correcting the first appearance by a more accurate consideration, and by a com-

parison with some rule, of whose rectitude from repeated trials we have a greater assurance. And 'tis from these corrections, and by carrying on the same action of the mind, even when its reason fails us, that we form the loose idea of a perfect standard to these figures, without being able to explain or comprehend it.

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'Tis true, mathematicians pretend they give an exact definition of a right line, when they say, *it is the shortest way betwixt two points.* But in the first place I observe, that this is more properly the discovery of one of the properties of a right line, than a just definition of it. For I ask any one, if upon mention of a right line he thinks not immediately on such a particular appearance, and if 'tis not by accident only that he considers this property? A right line can be comprehended alone; but this definition is unintelligible without a comparison with other lines, which we conceive to be more extended. In common life 'tis establish'd as a maxim, that the straightest way is always the shortest; which wou'd be as absurd as to say, the shortest way is always the shortest, if our idea of a right line was not different from that of the shortest way betwixt two points.

Secondly, I repeat what I have already establish'd, that we have no precise idea of equality and inequality, shorter and longer, more than of a right line or a curve; and consequently that the one can never afford us a perfect standard for the other. An exact idea can never be built on such as are loose and undeterminate.

The idea of a *plain surface* is as little susceptible of a precise standard as that of a right line; nor have we any other means of distinguishing such a surface, than its general appearance. 'Tis in vain, that mathematicians represent a plain surface as produc'd by the flowing of a right line. 'Twill immediately be objected, that our idea of a surface is as independent of this method of forming a surface, as our idea of an ellipse is of that of a cone; that the idea of a right line is no more precise than that of a plain surface; that a right line may flow irregularly, and by that means form a figure quite different from a plane; and that therefore we must suppose it to flow along two right lines, parallel to each other, and on the same plane; which is a description, that explains a thing by itself, and returns in a circle.

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It appears, then, that the ideas which are most essential to geometry, *viz.* those of equality and inequality, of a right line and a plain surface, are far from being exact and determinate, according to our common method of conceiving them. Not only we are incapable of telling, if the case be in any degree doubtful, when such particular figures are equal; when such a line is a right one, and such a surface a plain one; but we can form no idea of that proportion, or of these figures, which is firm and invariable. Our appeal is still to the weak and fallible judgment, which we make from the appearance of the objects, and correct by a compass or common measure; and if we join the supposition of any farther correction, 'tis of such-a-one as is either useless or imaginary. In vain shou'd we have recourse to the common topic, and employ the supposition of a deity, whose omnipotence may enable him to form a perfect geometrical figure, and describe a right line without any curve or inflexion. As the ultimate standard of these figures is deriv'd from nothing but the senses and imagination, 'tis absurd to talk of any perfection beyond what these faculties can judge of; since the true perfection of any thing consists in its conformity to its standard.

Now since these ideas are so loose and uncertain, I wou'd fain ask any mathematician what infallible assurance he has, not only of the more intricate and obscure propositions of his science, but of the most vulgar and obvious principles? How can he prove to me, for instance, that two right lines cannot have one common segment? Or that 'tis impossible to draw more than one right line betwixt any two points? Shou'd he tell me, that these opinions are obviously absurd, and repugnant to our clear ideas; I would answer, that I do not deny, where two right lines incline upon each other with a sensible angle, but 'tis absurd to imagine them to have a common segment. But supposing these two lines to approach at the rate of an inch in twenty leagues, I perceive no absurdity in asserting, that upon their contact they become one. For, I beseech you, by what rule or standard do you judge, when you assert, that the line, in which I have suppos'd them to concur, cannot make the same right line with those two, that form so small an angle betwixt them? You must surely have some idea of a right line, to which this line does not agree. Do you therefore mean that it

takes not the points in the same order and by the same rule, as is peculiar and essential to a right line? If so, I must inform you, that besides that in judging after this manner you allow, that extension is compos'd of indivisible points (which, perhaps, is more than you intend) besides this, I say, I must inform you, that neither is this the standard from which we form the idea of a right line; nor, if it were, is there any such firmness in our senses or imagination, as to determine when such an order is violated or preserv'd. The original standard of a right line is in reality nothing but a certain general appearance; and 'tis evident right lines may be made to concur with each other, and yet correspond to this standard, tho' corrected by all the means either practicable or imaginable.

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[1]To whatever side mathematicians turn, this dilemma still meets them. If they judge of equality, or any other proportion, by the accurate and exact standard, *viz.* the enumeration of the minute indivisible parts, they both employ a standard, which is useless in practice, and actually establish the indivisibility of extension, which they endeavour to explode. Or if they employ, as is usual, the inaccurate standard, deriv'd from a comparison of objects, upon their general appearance, corrected by measuring and juxta-position; their first principles, tho' certain and infallible, are too coarse to afford any such subtile inferences as they commonly draw from them. The first principles are founded on the imagination and senses: The conclusion, therefore, can never go beyond, much less contradict these faculties.[2]

This may open our eyes a little, and let us see, that no geometrical demonstration for the infinite divisibility of extension can have so much force as what we naturally attribute to every argument, which is supported by such magnificent pretensions. At the same time we may learn the reason, why geometry fails of evidence in this single point, while all its other reasonings command our fullest assent and approbation. And indeed it seems more requisite to give the reason of this exception, than to shew, that we really must make such an exception, and regard all the mathematical arguments for infinite divisibility as utterly sophistical. For 'tis evident, that as no idea of quantity is in-

[1] [The following paragraph was added in the Appendix.—Ed.]

[2] [Cf. page 373, and Introd. § 275.]

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finitely divisible, there cannot be imagin'd a more glaring absurdity, than to endeavour to prove, that quantity itself admits of such a division; and to prove this by means of ideas, which are directly opposite in that particular. And as this absurdity is very glaring in itself, so there is no argument founded on it, which is not attended with a new absurdity, and involves not an evident contradiction.

I might give as instances those arguments for infinite divisibility, which are deriv'd from the *point of contact*. I know there is no mathematician, who will not refuse to be judg'd by the diagrams he describes upon paper, these being loose draughts, as he will tell us, and serving only to convey with greater facility certain ideas, which are the true foundation of all our reasoning. This I am satisfy'd with, and am willing to rest the controversy merely upon these ideas. I desire therefore our mathematician to form, as accurately as possible, the ideas of a circle and a right line; and I then ask, if upon the conception of their contact he can conceive them as touching in a mathematical point, or if he must necessarily imagine them to concur for some space. Which-ever side he chuses, he runs himself into equal difficulties. If he affirms, that in tracing these figures in his imagination, he can imagine them to touch only in a point, he allows the possibility of that idea, and consequently of the thing. If he says, that in his conception of the contact of those lines he must make them concur, he thereby acknowledges the fallacy of geometrical demonstrations, when carry'd beyond a certain degree of minuteness; since 'tis certain he has such demonstrations against the concurrence of a circle and a right line; that is, in other words, he can prove an idea, *viz.* that of concurrence, to be *incompatible* with two other ideas, *viz.* those of a circle and right line; tho' at the same time he acknowledges these ideas to be *inseparable*.

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If the second part of my system be true, *that the idea of space or extension is nothing but the idea of visible or tangible points distributed in a certain order;* it follows, that we can form no idea of a vacuum, or space, where there is nothing visible or tangible.[1] This gives rise to three objections,

[1] [See Introd. § 278.—Ed.]

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which I shall examine together, because the answer I shall give to one is a consequence of that which I shall make use of for the others.

First, It may be said, that men have disputed for many ages concerning a vacuum and a plenum, without being able to bring the affair to a final decision; and philosophers, even at this day, think themselves at liberty to take part on either side, as their fancy leads them. But whatever foundation there may be for a controversy concerning the things themselves, it may be pretended, that the very dispute is decisive concerning the idea, and that 'tis impossible men cou'd so long reason about a vacuum, and either refute or defend it, without having a notion of what they refuted or defended.

Secondly, If this argument shou'd be contested, the reality or at least the possibility of the *idea* of a vacuum may be prov'd by the following reasoning. Every idea is possible, which is a necessary and infallible consequence of such as are possible. Now tho' we allow the world to be at present a plenum, we may easily conceive it to be depriv'd of motion; and this idea will certainly be allow'd possible. It must also be allow'd possible, to conceive the annihilation of any part of matter by the omnipotence of the deity, while the other parts remain at rest. For as every idea, that is distinguishable, is separable by the imagination; and as every idea, that is separable by the imagination, may be conceiv'd to be separately existent; 'tis evident, that the existence of one particle of matter, no more implies the existence of another, than a square figure in one body implies a square figure in every one. This being granted, I now demand what results from the concurrence of these two possible ideas of *rest* and *annihilation*, and what must we conceive to follow upon the annihilation of all the air and subtile matter in the chamber, supposing the walls to remain the same, without any motion or alteration? There are some metaphysicians, who answer, that since matter and extension are the same, the annihilation of one necessarily implies that of the other; and there being now no distance betwixt the walls of the chamber, they touch each other; in the same manner as my hand touches the paper, which is immediately before me. But tho' this answer be very common, I defy these metaphysicians to conceive the matter according to

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their hypothesis, or imagine the floor and roof, with all the opposite sides of the chamber, to touch each other, while they continue in rest, and preserve the same position. For how can the two walls, that run from south to north, touch each other, while they touch the opposite ends of two walls, that run from east to west? And how can the floor and roof ever meet, while they are separated by the four walls, that lie in a contrary position? If you change their position, you suppose a motion. If you conceive any thing betwixt them, you suppose a new creation. But keeping strictly to the two ideas of *rest* and *annihilation*, 'tis evident, that the idea, which results from them, is not that of a contact of parts, but something else; which is concluded to be the idea of a vacuum.

The third objection carries the matter still farther, and not only asserts, that the idea of a vacuum is real and possible, but also necessary and unavoidable. This assertion is founded on the motion we observe in bodies, which, 'tis maintain'd, wou'd be impossible and inconceivable without a vacuum, into which one body must move in order to make way for another. I shall not enlarge upon this objection, because it principally belongs to natural philosophy, which lies without our present sphere.

In order to answer these objections, we must take the matter pretty deep, and consider the nature and origin of several ideas, lest we dispute without understanding perfectly the subject of the controversy. 'Tis evident the idea of darkness is no positive idea, but merely the negation of light, or more properly speaking, of colour'd and visible objects. A man, who enjoys his sight, receives no other perception from turning his eyes on every side, when entirely depriv'd of light, than what is common to him with one born blind; and 'tis certain such-a-one has no idea either of light or darkness. The consequence of this is, that 'tis not from the mere removal of visible objects we receive the impression of extension without matter; and that the idea of utter darkness can never be the same with that of vacuum.

Suppose again a man to be supported in the air, and to be softly convey'd along by some invisible power; 'tis evident he is sensible of nothing, and never receives the idea of extension, nor indeed any idea, from this invariable motion. Even supposing he moves his limbs to and fro, this cannot

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convey to him that idea. He feels in that case a certain sensation or impression, the parts of which are successive to each other, and may give him the idea of time: But certainly are not dispos'd in such a manner, as is necessary to convey the idea of space or extension.

Since then it appears, that darkness and motion, with the utter removal of every thing visible and tangible, can never give us the idea of extension without matter, or of a vacuum; the next question is, whether they can convey this idea, when mix'd with something visible and tangible?

'Tis commonly allow'd by philosophers, that all bodies, which discover themselves to the eye, appear as if painted on a plain surface, and that their different degrees of remoteness from ourselves are discover'd more by reason than by the senses. When I hold up my hand before me, and spread my fingers, they are separated as perfectly by the blue colour of the firmament, as they cou'd be by any visible object, which I cou'd place betwixt them. In order, therefore, to know whether the sight can convey the impression and idea of a vacuum, we must suppose, that amidst an entire darkness, there are luminous bodies presented to us, whose light discovers only these bodies themselves, without giving us any impression of the surrounding objects.

We must form a parallel supposition concerning the objects of our feeling. 'Tis not proper to suppose a perfect removal of all tangible objects: we must allow something to be perceiv'd by the feeling; and after an interval and motion of the hand or other organ of sensation, another object of the touch to be met with; and upon leaving that, another; and so on, as often as we please. The question is, whether these intervals do not afford us the idea of extension without body?

To begin with the first case; 'tis evident, that when only two luminous bodies appear to the eye, we can perceive, whether they be conjoin'd or separate; whether they be separated by a great or small distance; and if this distance varies, we can perceive its increase or diminution, with the motion of the bodies. But as the distance is not in this case any thing colour'd or visible, it may be thought that there is here a vacuum or pure extension, not only intelligible to the mind, but obvious to the very senses.

This is our natural and most familiar way of thinking; but which we shall learn to correct by a little reflection. We

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may observe, that when two bodies present themselves, where there was formerly an entire darkness, the only change, that is discoverable, is in the appearance of these two objects, and that all the rest continues to be as before, a perfect negation of light, and of every colour'd or visible object. This is not only true of what may be said to be remote from these bodies, but also of the very distance; which is interpos'd betwixt them; *that* being nothing but darkness, or the negation of light; without parts, without composition, invariable and indivisible. Now since this distance causes no perception different from what a blind man receives from his eyes, or what is convey'd to us in the darkest night, it must partake of the same properties: And as blindness and darkness afford us no ideas of extension, 'tis impossible that the dark and undistinguishable distance betwixt two bodies can ever produce that idea.[1]

The sole difference betwixt an absolute darkness and the appearance of two or more visible luminous objects consists, as I said, in the objects themselves, and in the manner they affect our senses. The angles, which the rays of light flowing from them, form with each other; the motion that is requir'd in the eye, in its passage from one to the other; and the different parts of the organs, which are affected by them; these produce the only perceptions, from which we can judge of the distance.[2] But as these perceptions are each of them simple and indivisible, they can never give us the idea of extension.

We may illustrate this by considering the sense of feeling, and the imaginary distance or interval interpos'd betwixt tangible or solid objects. I suppose two cases, *viz.* that of a man supported in the air, and moving his limbs to and fro, without meeting any thing tangible; and that of a man, who feeling something tangible, leaves it, and after a motion, of which he is sensible, perceives another tangible object; and I then ask, wherein consists the difference betwixt these two cases? No one will make any scruple to affirm, that it consists meerly in the perceiving those objects, and that the sensation, which arises from the motion, is in both cases the same: And as that sensation is not capable

[1] [See Introd. §§ 279 and 280.—Ed.]

[2] [In the Appendix this statement is corrected, as might be expected from a follower of Berkeley. See last page.—Ed.]

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The same subject continu'd.

of conveying to us an idea of extension, when unaccompany'd with some other perception, it can no more give us that idea, when mix'd with the impressions of tangible objects; since that mixture produces no alteration upon it.

But tho' motion and darkness, either alone, or attended with tangible and visible objects, convey no idea of a vacuum or extension without matter, yet they are the causes why we falsly imagine we can form such an idea. For there is a close relation[1] betwixt that motion and darkness, and a real extension, or composition of visible and tangible objects.

First, We may observe, that two visible objects appearing in the midst of utter darkness, affect the senses in the same manner, and form the same angle by the rays, which flow from them, and meet in the eye, as if the distance betwixt them were fill'd with visible objects, that give us a true idea of extension. The sensation of motion is likewise the same, when there is nothing tangible interpos'd betwixt two bodies, as when we feel a compounded body, whose different parts are plac'd beyond each other.

Secondly, We find by experience, that two bodies, which are so plac'd as to affect the senses in the same manner with two others, that have a certain extent of visible objects interpos'd betwixt them, are capable of receiving the same extent, without any sensible impulse or penetration, and without any change on that angle, under which they appear to the senses. In like manner, where there is one object, which we cannot feel after another without an interval, and the perceiving of that sensation we call motion in our hand or organ of sensation; experience shews us, that 'tis possible the same object may be felt with the same sensation of motion, along with the interpos'd impression of solid and tangible objects, attending the sensation. That is, in other words, an invisible and intangible distance may be converted into a visible and tangible one, without any change on the distant objects.

Thirdly, We may observe, as another relation betwixt these two kinds of distance, that they have nearly the same effects on every natural phænomenon. For as all qualities, such as heat, cold, light, attraction, &c. diminish in proportion to the distance; there is but little difference observ'd,

[1] [Sc. 'Natural Relation' in Hume's sense; see above, page 322.— Ed.]

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whether this distance be mark'd out by compounded and sensible objects, or be known only by the manner, in which the distant objects affect the senses.

Here then are three relations betwixt that distance, which conveys the idea of extension, and that other, which is not fill'd with any colour'd or solid object. The distant objects affect the senses in the same manner, whether separated by the one distance or the other; the second species of distance is found capable of receiving the first; and they both equally diminish the force of every quality.[1]

These relations betwixt the two kinds of distance will afford us an easy reason, why the one has so often been taken for the other, and why we imagine we have an idea of extension without the idea of any object either of the sight or feeling. For we may establish it as a general maxim in this science of human nature, that wherever there is a close relation betwixt two ideas, the mind is very apt to mistake them, and in all its discourses and reasonings to use the one for the other. This phænomenon occurs on so many occasions, and is of such consequence, that I cannot forbear stopping a moment to examine its causes. I shall only premise, that we must distinguish exactly betwixt the phænomenon itself, and the causes, which I shall assign for it; and must not imagine from any uncertainty in the latter, that the former is also uncertain. The phænomenon may be real, tho' my explication be chimerical. The falshood of the one is no consequence of that of the other; tho' at the same time we may observe, that 'tis very natural for us to draw such a consequence; which is an evident instance of that very principle, which I endeavour to explain.

When I receiv'd the relations of *resemblance*, *contiguity* and *causation*, as principles of union among ideas, without examining into their causes, 'twas more in prosecution of my first maxim, that we must in the end rest contented with experience, than for want of something specious and plausible, which I might have display'd on that subject. 'Twou'd have been easy to have made an imaginary dissection of the brain, and have shewn, why upon our conception of any idea, the animal spirits run into all the contiguous traces, and rouze up the other ideas, that are related to it. But tho' I have

[1] [See Introd. § 280.—Ed.]

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neglected any advantage, which I might have drawn from this topic in explaining the relations of ideas, I am afraid I must here have recourse to it, in order to account for the mistakes that arise from these relations. I shall therefore observe, that as the mind is endow'd with a power of exciting any idea it pleases; whenever it dispatches the spirits into that region of the brain, in which the idea is plac'd; these spirits always excite the idea, when they run precisely into the proper traces, and rummage that cell, which belongs to the idea. But as their motion is seldom direct, and naturally turns a little to the one side or the other; for this reason the animal spirits, falling into the contiguous traces, present other related ideas in lieu of that, which the mind desir'd at first to survey. This change we are not always sensible of; but continuing still the same train of thought, make use of the related idea, which is presented to us, and employ it in our reasoning, as if it were the same with what we demanded. This is the cause of many mistakes and sophisms in philosophy; as will naturally be imagin'd, and as it wou'd be easy to show, if there was occasion.

Of the three relations above-mention'd that of resemblance is the most fertile source of error; and indeed there are few mistakes in reasoning, which do not borrow largely from that origin. Resembling ideas are not only related together, but the actions of the mind, which we employ in considering them, are so little different, that we are not able to distinguish them. This last circumstance is of great consequence; and we may in general observe, that wherever the actions of the mind in forming any two ideas are the same or resembling, we are very apt to confound these ideas, and take the one for the other. Of this we shall see many instances in the progress of this treatise. But tho' resemblance be the relation, which most readily produces a mistake in ideas, yet the others of causation and contiguity may also concur in the same influence. We might produce the figures of poets and orators, as sufficient proofs of this, were it as usual, as it is reasonable, in metaphysical subjects to draw our arguments from that quarter. But lest metaphysicians shou'd esteem this below their dignity, I shall borrow a proof from an observation, which may be made on most of their own discourses, *viz.* that 'tis usual for men to use words for ideas, and to talk instead of thinking in their reasonings.

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We use words for ideas, because they are commonly so closely connected, that the mind easily mistakes them. And this likewise is the reason, why we substitute the idea of a distance, which is not consider'd either as visible or tangible, in the room of extension, which is nothing but a composition of visible or tangible points dispos'd in a certain order. In causing this mistake there concur both the relations of *causation* and *resemblance*. As the first species of distance is found to be convertible into the second, 'tis in this respect a kind of cause; and the similarity of their manner of affecting the senses, and diminishing every quality, forms the relation of resemblance.

After this chain of reasoning and explication of my principles, I am now prepar'd to answer all the objections that have been offer'd, whether deriv'd from *metaphysics* or *mechanics*. The frequent disputes concerning a vacuum, or extension without matter, prove not the reality of the idea, upon which the dispute turns; there being nothing more common, than to see men deceive themselves in this particular; especially when by means of any close relation, there is another idea presented, which may be the occasion of their mistake.

We may make almost the same answer to the second objection, deriv'd from the conjunction of the ideas of rest and annihilation. When every thing is annihilated in the chamber, and the walls continue immoveable, the chamber must be conceiv'd much in the same manner as at present, when the air that fills it, is not an object of the senses. This annihilation leaves to the *eye*, that fictitious distance, which is discover'd by the different parts of the organ, that are affected, and by the degrees of light and shade; and to the *feeling*, that which consists in a sensation of motion in the hand, or other member of the body. In vain shou'd we search any farther. On whichever side we turn this subject, we shall find that these are the only impressions such an object can produce after the suppos'd annihilation; and it has already been remark'd, that impressions can give rise to no ideas, but to such as resemble them.

Since a body interpos'd betwixt two others may be suppos'd to be annihilated, without producing any change upon such as lie on each hand of it, 'tis easily conceiv'd, how it may be created anew, and yet produce as little alteration. Now the motion of a body has much the same effect as its creation.

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The distant bodies are no more affected in the one case, than in the other. This suffices to satisfy the imagination, and proves there is no repugnance in such a motion. Afterwards experience comes in play to persuade us that two bodies, situated in the manner above-describ'd, have really such a capacity of receiving body betwixt them, and that there is no obstacle to the conversion of the invisible and intangible distance into one that is visible and tangible. However natural that conversion may seem, we cannot be sure it is practicable, before we have had experience of it.

Thus I seem to have answer'd the three objections above-mention'd; tho' at the same time I am sensible, that few will be satisfy'd with these answers, but will immediately propose new objections and difficulties. 'Twill probably be said, that my reasoning makes nothing to the matter in hand, and that I explain only the manner in which objects affect the senses, without endeavouring to account for their real nature and operations. Tho' there be nothing visible or tangible interpos'd betwixt two bodies, yet we find *by experience*, that the bodies may be plac'd in the same manner, with regard to the eye, and require the same motion of the hand in passing from one to the other, as if divided by something visible and tangible. This invisible and intangible distance is also found *by experience* to contain a capacity of receiving body, or of becoming visible and tangible. Here is the whole of my system; and in no part of it have I endeavour'd to explain the cause, which separates bodies after this manner, and gives them a capacity of receiving others betwixt them, without any impulse or penetration.

I answer this objection, by pleading guilty, and by confessing that my intention never was to penetrate into the nature of bodies, or explain the secret causes of their operations. For besides that this belongs not to my present purpose, I am afraid, that such an enterprize is beyond the reach of human understanding, and that we can never pretend to know body otherwise than by those external properties, which discover themselves to the senses. As to those who attempt any thing farther, I cannot approve of their ambition, till I see, in some one instance at least, that they have met with success. But at present I content myself with knowing perfectly the manner in which objects affect my senses, and their connections with each other, as far as experience informs me of

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them. This suffices for the conduct of life; and this also suffices for my philosophy, which pretends only to explain the nature and causes of our perceptions,or impressions and ideas.[1]

I shall conclude this subject of extension with a paradox, which will easily be explain'd from the foregoing reasoning. This paradox is, that if you are pleas'd to give to the invisible and intangible distance, or in other words, to the capacity of becoming a visible and tangible distance, the name of a vacuum, extension and matter are the same, and yet there is a vacuum. If you will not give it that name, motion is possible in a plenum, without any impulse *in infinitum*, without returning in a circle, and without penetration. But however we may express ourselves, we must always confess, that we have no idea of any real extension without filling it with sensible objects, and conceiving its parts as visible or tangible.

As to the doctrine, that time is nothing but the manner, in which some real objects exist; we may observe, that 'tis liable to the same objections as the similar doctrine with regard to extension. If it be a sufficient proof, that we have the idea of a vacuum, because we dispute and reason con-

[1] [The following note was added in the Appendix.—Ed.]

As long as we confine our speculations to *the appearances* of objects to our senses, without entering into disquisitions concerning their real nature and operations, we are safe from all difficulties, and can never be embarrass'd by any question. Thus, if it be ask'd, if the invisible and intangible distance, interposed betwixt two objects, be something or nothing: 'Tis easy to answer, that it is *something*, viz. a property of the objects, which affect the *senses* after such a particular manner. If it be ask'd,whether two objects, having such a distance betwixt them, touch or not: It may be answer'd, that this depends upon the definition of the word, *touch*. If objects be said to touch, when there is nothing *sensible* interpos'd betwixt them, these objects touch: If objects be said to touch, when their *images* strike contiguous parts of the eye, and when the hand *feels* both objects successively, without any interpos'd motion, these objects do not touch. The appearances of objects to our senses are all consistent; and no difficulties can ever arise, but from the obscurity of the terms we make use of.——If we carry our enquiry beyond the appearances of objects to the senses, I am afraid, that most of our conclusions will be full of scepticism and uncertainty. Thus if it be ask'd, whether or not the invisible and intangible distance be always full of *body*, or of something that by an improvement of our organs might become visible or tangible, I must acknowledge, that I find no very decisive arguments on either side; tho' I am inclin'd to the contrary opinion, as being more suitable to vulgar and popular notions. If *the Newtonian* philosophy be rightly understood, it will be found to mean no more. A vacuum is asserted: That is, bodies are said to be plac'd after such a manner, as to receive bodies betwixt them, without impulsion or penetration. The real nature of this position of bodies is unknown. We are only acquainted with its effects on the senses, and its power of receiving body. Nothing is more suitable to that philosophy, than a modest scepticism to a certain degree, and a fair confession of ignorance in subjects, that exceed all human capacity.

SECT. V.

The same subject continu'd.

cerning it; we must for the same reason have the idea of time without any changeable existence; since there is no subject of dispute more frequent and common.[1] But that we really have no such idea, is certain. For whence shou'd it be deriv'd? Does it arise from an impression of sensation or of reflection? Point it out distinctly to us, that we may know its nature and qualities. But if you cannot point out *any such impression*, you may be certain you are mistaken, when you imagine you have *any such idea*.

But tho' it be impossible to shew the impression, from which the idea of time without a changeable existence is deriv'd; yet we can easily point out those appearances, which make us fancy we have that idea. For we may observe, that there is a continual succession of perceptions in our mind; so that the idea of time being for ever present with us; when we consider a stedfast object at five-a-clock, and regard the same at six; we are apt to apply to it that idea in the same manner as if every moment were distinguish'd by a different position, or an alteration of the object. The first and second appearances of the object, being compar'd with the succession of our perceptions, seem equally remov'd as if the object had really chang'd. To which we may add, what experience shews us, that the object was susceptible of such a number of changes betwixt these appearances; as also that the unchangeable or rather fictitious duration has the same effect upon every quality, by encreasing or diminishing it, as that succession, which is obvious to the senses. From these three relations we are apt to confound our ideas, and imagine we can form the idea of a time and duration, without any change or succession.

SECT. VI.—*Of the Idea of Existence, and of External Existence.*

It may not be amiss, before we leave this subject, to explain the ideas of *existence* and of *external existence*; which have their difficulties, as well as the ideas of space and time. By this means we shall be the better prepar'd for the examination of knowledge and probability, when we understand perfectly all those particular ideas, which may enter into our reasoning.

[1] [But cf. above, page 339, as to idea of extension.—Ed.]

PART II.

Of the ideas of space and time.

There is no impression nor idea of any kind, of which we have any consciousness or memory, that is not conceiv'd as existent; and 'tis evident, that from this consciousness the most perfect idea and assurance of *being* is deriv'd. From hence we may form a dilemma, the most clear and conclusive that can be imagin'd, *viz.* that since we never remember any idea or impression, without attributing existence to it, the idea of existence must either be deriv'd from a distinct impression, conjoin'd with every perception or object of our thought, or must be the very same with the idea of the perception or object.

As this dilemma is an evident consequence of the principle, that every idea arises from a similar impression, so our decision betwixt the propositions of the dilemma is no more doubtful. So far from there being any distinct impression, attending every impression and every idea, that I do not think there are any two distinct impressions, which are inseparably conjoin'd. Tho' certain sensations may at one time be united, we quickly find they admit of a separation, and may be presented apart. And thus, tho' every impression and idea we remember be consider'd as existent, the idea of existence is not deriv'd from any particular impression.

The idea of existence, then, is the very same with the idea of what we conceive to be existent. To reflect on any thing simply, and to reflect on it as existent, are nothing different from each other. That idea, when conjoin'd with the idea of any object, makes no addition to it. Whatever we conceive, we conceive to be existent. Any idea we please to form is the idea of a being; and the idea of a being is any idea we please to form.[1]

Whoever opposes this, must necessarily point out that distinct impression, from which the idea of entity is deriv'd, and must prove, that this impression is inseparable from every perception we believe to be existent. This we may without hesitation conclude to be impossible.

Our foregoing[2] reasoning concerning the *distinction* of ideas without any real *difference* will not here serve us in any stead. That kind of distinction is founded on the different resemblances, which the same simple idea may have to several different ideas. But no object can be presented

[1] [See below, p. 394, and Introd. §§ 223 and 291.]

[2] Part I. Sect. 7.

SECT. VI.

Of the idea of existence, and of external existence.

resembling some object with respect to its existence, and different from others in the same particular; since every object, that is presented, must necessarily be existent.

A like reasoning will account for the idea of *external existence*. We may observe, that 'tis universally allow'd by philosophers, and is besides pretty obvious of itself, that nothing is ever really present with the mind but its perceptions or impressions and ideas, and that external objects become known to us only by those perceptions they occasion. To hate, to love, to think, to feel, to see; all this is nothing but to perceive.[1]

Now since nothing is ever present to the mind but perceptions, and since all ideas are deriv'd from something antecedently present to the mind; it follows, that 'tis impossible for us so much as to conceive or form an idea of any thing specifically different from ideas and impressions. Let us fix our attention out of ourselves as much as possible: Let us chace our imagination to the heavens, or to the utmost limits of the universe; we never really advance a step beyond ourselves, nor can conceive any kind of existence, but those perceptions, which have appear'd in that narrow compass. This is the universe of the imagination, nor have we any idea but what is there produc'd.

The farthest we can go towards a conception of external objects, when suppos'd *specifically* different from our perceptions, is to form a relative idea of them, without pretending to comprehend the related objects. Generally speaking we do not suppose them specifically different; but only attribute to them different relations, connections and durations. But of this more fully hereafter.[2]

[1] [See Introd. § 236.]

[2] Part IV. Sect. 2.

PART III.

OF KNOWLEDGE AND PROBABILITY.

SECT. I.—*Of Knowledge.*

PART III.

Of knowledge and probability.

THERE are [1] seven different kinds of philosophical relation, *viz. resemblance, identity, relations of time and place,*[2] *proportion in quantity or number, degrees in any quality, contrariety, and causation.* These relations may be divided into two classes; into such as depend entirely on the ideas, which we compare together, and such as may be chang'd without any change in the ideas.[3] 'Tis from the idea of a triangle, that we discover the relation of equality, which its three angles bear to two right ones; and this relation is invariable, as long as our idea remains the same. On the contrary, the relations of *contiguity* and *distance* betwixt two objects may be chang'd merely by an alteration of their place, without any change on the objects themselves or on their ideas; and the place depends on a hundred different accidents, which cannot be foreseen by the mind. 'Tis the same case with *identity* and *causation.* Two objects, tho' perfectly resembling each other, and even appearing in the same place at different times, may be numerically different: And as the power, by which one object produces another, is never discoverable merely from their idea, 'tis evident *cause* and *effect* are relations, of which we receive information from experience, and not from any abstract reasoning or reflection. There is no single phænomenon, even the most simple, which can be accounted for from the qualities of the objects, as they appear to us; or which we cou'd foresee without the help of our memory and experience.

It appears, therefore, that of these seven philosophical relations, there remain only four, which depending solely

[1] Part I. Sect. 5.

[2] ['*Space*' in the enumeration previously given, p. 318.]

[3] [See Introd. § 283.]

SECT. I. Of knowledge.

upon ideas, can be the objects of knowledge and certainty. These four are *resemblance*, *contrariety*, *degrees in quality*, *and proportions in quantity or number*. Three of these relations are discoverable at first sight, and fall more properly under the province of intuition than demonstration. When any objects *resemble* each other, the resemblance will at first strike the eye, or rather the mind; and seldom requires a second examination. The case is the same with *contrariety*, and with the *degrees* of any *quality*. No one can once doubt but existence and non-existence destroy each other, and are perfectly incompatible and contrary. And tho' it be impossible to judge exactly of the degrees of any quality, such as colour, taste, heat, cold, when the difference betwixt them is very small; yet 'tis easy to decide, that any of them is superior or inferior to another, when their difference is considerable. And this decision we always pronounce at first sight, without any enquiry or reasoning.

We might proceed, after the same manner, in fixing the *proportions* of *quantity* or *number*, and might at one view observe a superiority or inferiority betwixt any numbers, or figures; especially where the difference is very great and remarkable. As to equality or any exact proportion, we can only guess at it from a single consideration; except in very short numbers, or very limited portions of extension; which are comprehended in an instant, and where we perceive an impossibility of falling into any considerable error. In all other cases we must settle the proportions with some liberty, or proceed in a more *artificial* manner.

I have already[1] observ'd, that geometry, or the *art*, by which we fix the proportions of figures; tho' it much excels both in universality and exactness, the loose judgments of the senses and imagination; yet never attains a perfect precision and exactness. It's first principles are still drawn from the general appearance of the objects; and that appearance can never afford us any security, when we examine the prodigious minuteness of which nature is susceptible. Our ideas seem to give a perfect assurance, that no two right lines can have a common segment; but if we consider these ideas, we shall find, that they always suppose a sensible inclination of the two lines, and that where the angle they form is extremely small, we have no standard of a

[1] [See above, p. 357.]

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right line so precise as to assure us of the truth of this proposition. 'Tis the same case with most of the primary decisions of the mathematics.

There remain, therefore, algebra and arithmetic as the only sciences, in which we can carry on a chain of reasoning to any degree of intricacy, and yet preserve a perfect exactness and certainty. We are possest of a precise standard, by which we can judge of the equality and proportion of numbers; and according as they correspond or not to that standard, we determine their relations, without any possibility of error.[1] When two numbers are so combin'd, as that the one has always an unite answering to every unite of the other, we pronounce them equal; and 'tis for want of such a standard of equality in extension, that geometry can scarce be esteem'd a perfect and infallible science.

But here it may not be amiss to obviate a difficulty, which may arise from my asserting, that tho' geometry falls short of that perfect precision and certainty, which are peculiar to arithmetic and algebra, yet it excels the imperfect judgments of our senses and imagination. The reason why I impute any defect to geometry, is, because its original and fundamental principles are deriv'd merely from appearances; and it may perhaps be imagin'd, that this defect must always attend it, and keep it from ever reaching a greater exactness in the comparison of objects or ideas, than what our eye or imagination alone is able to attain. I own that this defect so far attends it, as to keep it from ever aspiring to a full certainty: But since these fundamental principles depend on the easiest and least deceitful appearances, they bestow on their consequences a degree of exactness, of which these consequences are singly incapable. 'Tis impossible for the eye to determine the angles of a chiliagon to be equal to 1996 right angles, or make any conjecture, that approaches this proportion; but when it determines, that right lines cannot concur; that we cannot draw more than one right line between two given points; it's mistakes can never be of any consequence. And this is the nature and use of geometry, to run us up to such appearances, as, by reason of their simplicity, cannot lead us into any considerable error.

I shall here take occasion to propose a second observation concerning our demonstrative reasonings, which is suggested

[1] [See Introd. § 277.]

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by the same subject of the mathematics. 'Tis usual with mathematicians, to pretend, that those ideas, which are their objects, are of so refin'd and spiritual a nature, that they fall not under the conception of the fancy, but must be comprehended by a pure and intellectual view, of which the superior faculties of the soul are alone capable. The same notion runs thro' most parts of philosophy, and is principally made use of to explain our abstract ideas, and to shew how we can form an idea of a triangle, for instance, which shall neither be an isoceles nor scalenum, nor be confin'd to any particular length and proportion of sides. 'Tis easy to see, why philosophers are so fond of this notion of some spiritual and refin'd perceptions; since by that means they cover many of their absurdities, and may refuse to submit to the decisions of clear ideas, by appealing to such as are obscure and uncertain. But to destroy this artifice, we need but reflect on that principle so oft insisted on, *that all our ideas are copy'd from our impressions.* For from thence we may immediately conclude, that since all impressions are clear and precise, the ideas, which are copy'd from them, must be of the same nature, and can never, but from our fault, contain any thing so dark and intricate. An idea is by its very nature weaker and fainter than an impression; but being in every other respect the same, cannot imply any very great mystery.[1] If its weakness render it obscure, 'tis our business to remedy that defect, as much as possible, by keeping the idea steady and precise; and till we have done so, 'tis in vain to pretend to reasoning and philosophy.

SECT. II.—*Of Probability; and of the Idea of Cause and Effect.*

This is all I think necessary to observe concerning those four relations, which are the foundation of science; but as to the other three, which depend not upon the idea, and may be absent or present even while *that* remains the same, 'twill be proper to explain them more particularly. These three relations are *identity, the situations in time and place, and causation.*

All kinds of reasoning consist in nothing but a *comparison,* and a discovery of those relations, either constant or inconstant, which two or more objects bear to each other.

[1] [See above, p. 327.]

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Of knowledge and probability.

This comparison we may make, either when both the objects are present to the senses, or when neither of them is present, or when only one. When both the objects are present to the senses along with the relation, we call *this* perception rather than reasoning; nor is there in this case any exercise of the thought, or any action, properly speaking, but a mere passive admission of the impressions thro' the organs of sensation.[1] According to this way of thinking, we ought not to receive as reasoning any of the observations we may make concerning *identity*, and the *relations* of *time* and *place;* since in none of them the mind can go beyond what is immediately present to the senses, either to discover the real existence or the relations of objects.[2] 'Tis only *causation*, which produces such a connexion, as to give us assurance from the existence or action of one object, that 'twas follow'd or preceded by any other existence or action; nor can the other two relations be ever made use of in reasoning, except so far as they either affect or are affected by it. There is nothing in any objects to perswade us, that they are either always *remote* or always *contiguous;* and when from experience and observation we discover, that their relation in this particular is invariable, we always conclude there is some secret *cause*, which separates or unites them. The same reasoning extends to *identity*. We readily suppose an object may continue individually the same, tho' several times absent from and present to the senses; and ascribe to it an identity, notwithstanding the interruption of the perception, whenever we conclude, that if we had kept our eye or hand constantly upon it, it wou'd have convey'd an invariable and uninterrupted perception. But this conclusion beyond the impressions of our senses can be founded only on the connexion of *cause and effect;* nor can we otherwise have any security, that the object is not chang'd upon us, however much the new object may resemble that which was formerly present to the senses.[3] Whenever we discover such a perfect resemblance, we consider, whether it be common in that species of objects; whether possibly or probably any cause cou'd operate in producing the change and resemblance; and according as we determine concerning these causes and effects, we form our judgment concerning the identity of the object.[4]

[1] [See Introd. § 327.]
[2] [Ibid. §§ 283, 284, and 300.]
[3] [Ibid. §§ 285, 286, and 301 and ff.]
[4] [Ibid. § 313.]

SECT. II.

Of probability; and of the idea of cause and effect.

Here then it appears, that of those three relations, which depend not upon the mere ideas, the only one, that can be trac'd beyond our senses, and informs us of existences and objects, which we do not see or feel, is *causation*. This relation, therefore, we shall endeavour to explain fully before we leave the subject of the understanding.

To begin regularly, we must consider the idea of *causation*, and see from what origin it is deriv'd. 'Tis impossible to reason justly, without understanding perfectly the idea concerning which we reason; and 'tis impossible perfectly to understand any idea, without tracing it up to its origin, and examining that primary impression, from which it arises. The examination of the impression bestows a clearness on the idea; and the examination of the idea bestows a like clearness on all our reasoning.

Let us therefore cast our eye on any two objects, which we call cause and effect, and turn them on all sides, in order to find that impression, which produces an idea of such prodigious consequence. At first sight I perceive, that I must not search for it in any of the particular *qualities* of the objects; since, which-ever of these qualities I pitch on, I find some object, that is not possest of it, and yet falls under the denomination of cause or effect. And indeed there is nothing existent, either externally or internally, which is not to be consider'd either as a cause or an effect; tho' 'tis plain there is no one quality, which universally belongs to all beings, and gives them a title to that denomination.

The idea, then, of causation must be deriv'd from some *relation* among objects; and that relation we must now endeavour to discover. I find in the first place, that whatever objects are consider'd as causes or effects, are *contiguous*; and that nothing can operate in a time or place, which is ever so little remov'd from those of its existence. Tho' distant objects may sometimes seem productive of each other, they are commonly found upon examination to be link'd by a chain of causes, which are contiguous among themselves, and to the distant objects; and when in any particular instance we cannot discover this connexion, we still presume it to exist. We may therefore consider the relation of *contiguity* as essential to that of causation; at least may suppose it such, according to the general opinion, till we can

PART III.

Of knowledge and probability.

find a more[1] proper occasion to clear up this matter, by examining what objects are or are not susceptible of juxtaposition and conjunction.

The second relation I shall observe as essential to causes and effects, is not so universally acknowledg'd, but is liable to some controversy. 'Tis that of PRIORITY of time in the cause before the effect. Some pretend that 'tis not absolutely necessary a cause shou'd precede its effect; but that any object or action, in the very first moment of its existence, may exert its productive quality, and give rise to another object or action, perfectly co-temporary with itself. But beside that experience in most instances seems to contradict this opinion, we may establish the relation of priority by a kind of inference or reasoning. 'Tis an establish'd maxim both in natural and moral philosophy, that an object, which exists for any time in its full perfection without producing another, is not its sole cause; but is assisted by some other principle, which pushes it from its state of inactivity, and makes it exert that energy, of which it was secretly possest. Now if any cause may be perfectly co-temporary with its effect, 'tis certain, according to this maxim, that they must all of them be so; since any one of them, which retards its operation for a single moment, exerts not itself at that very individual time, in which it might have operated; and therefore is no proper cause. The consequence of this wou'd be no less than the destruction of that succession of causes, which we observe in the world; and indeed, the utter annihilation of time. For if one cause were co-temporary with its effect, and this effect with *its* effect, and so on, 'tis plain there wou'd be no such thing as succession, and all objects must be co-existent.

If this argument appear satisfactory, 'tis well. If not, I beg the reader to allow me the same liberty, which I have us'd in the preceding case, of supposing it such. For he shall find, that the affair is of no great importance.

Having thus discover'd or suppos'd the two relations of *contiguity* and *succession* to be essential to causes and effects, I find I am stopt short, and can proceed no farther in considering any single instance of cause and effect. Motion in one body is regarded upon impulse as the cause of motion in another. When we consider these objects with the

[1] Part IV. Sect. 5.

SECT. II.

Of probability; and of the idea of cause and effect.

utmost attention, we find only that the one body approaches the other; and that the motion of it precedes that of the other, but without any sensible interval. 'Tis in vain to rack ourselves with *farther* thought and reflection upon this subject. We can go no *farther* in considering this particular instance.

Shou'd any one leave this instance, and pretend to define a cause, by saying it is something productive of another, 'tis evident he wou'd say nothing. For what does he mean by *production?* Can he give any definition of it, that will not be the same with that of causation? If he can; I desire it may be produc'd. If he cannot; he here runs in a circle, and gives a synonimous term instead of a definition.

Shall we then rest contented with these two relations of contiguity and succession, as affording a complete idea of causation? By no means. An object may be contiguous and prior to another, without being consider'd as its cause. There is a NECESSARY CONNEXION to be taken into consideration; and that relation is of much greater importance, than any of the other two above-mention'd.[1]

Here again I turn the object on all sides, in order to discover the nature of this necessary connexion, and find the impression, or impressions, from which its idea may be deriv'd. When I cast my eye on the *known qualities* of objects, I immediately discover that the relation of cause and effect depends not in the least on *them.* When I consider their *relations*, I can find none but those of contiguity and succession; which I have already regarded as imperfect and unsatisfactory. Shall the despair of success make me assert, that I am here possest of an idea, which is not preceded by any similar impression? This wou'd be too strong a proof of levity and inconstancy; since the contrary principle has been already so firmly establish'd, as to admit of no farther doubt; at least, till we have more fully examin'd the present difficulty.

We must, therefore, proceed like those, who being in search of any thing, that lies conceal'd from them, and not finding it in the place they expected, beat about all the neighbouring fields, without any certain view or design, in hopes their good fortune will at last guide them to what they search for.

[1] [See Introd. § 286.]

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Of knowledge and probability.

'Tis necessary for us to leave the direct survey of this question concerning the nature of that *necessary connexion*, which enters into our idea of cause and effect; and endeavour to find some other questions, the examination of which will perhaps afford a hint, that may serve to clear up the present difficulty. Of these questions there occur two, which I shall proceed to examine, *viz.*

First, For what reason we pronounce it *necessary*, that every thing whose existence has a beginning, shou'd also have a cause?

Secondly, Why we conclude, that such particular causes must *necessarily* have such particular effects; and what is the nature of that *inference* we draw from the one to the other, and of the *belief* we repose in it?[1]

I shall only observe before I proceed any farther, that tho' the ideas of cause and effect be deriv'd from the impressions of reflection as well as from those of sensation, yet for brevity's sake, I commonly mention only the latter as the origin of these ideas; tho' I desire that whatever I say of them may also extend to the former. Passions are connected with their objects and with one another; no less than external bodies are connected together. The same relation, then, of cause and effect, which belongs to one, must be common to all of them.

SECT. III.—*Why a Cause is always Necessary.*

To begin with the first question concerning the necessity of a cause: 'Tis a general maxim in philosophy, that *whatever begins to exist, must have a cause of existence.* This is commonly taken for granted in all reasonings, without any proof given or demanded. 'Tis suppos'd to be founded on intuition, and to be one of those maxims, which tho' they may be deny'd with the lips, 'tis impossible for men in their hearts really to doubt of. But if we examine this maxim by the idea of knowledge above-explain'd, we shall discover in it no mark of any such intuitive certainty; but on the contrary shall find, that 'tis of a nature quite foreign to that species of conviction.

All certainty arises from the comparison of ideas, and from the discovery of such relations as are unalterable, so

[1] [See Introd. § 287.]

SECT. III.

Why a cause is always necessary.

long as the ideas continue the same. These relations are *resemblance, proportions in quantity and number, degrees of any quality, and contrariety;* none of which are imply'd in this proposition, *Whatever has a beginning has also a cause of existence.* That proposition therefore is not intuitively certain. At least any one, who wou'd assert it to be intuitively certain, must deny these to be the only infallible relations, and must find some other relation of that kind to be imply'd in it; which it will then be time enough to examine.

But here is an argument, which proves at once, that the foregoing proposition is neither intuitively nor demonstrably certain. We can never demonstrate the necessity of a cause to every new existence, or new modification of existence, without shewing at the same time the impossibility there is, that any thing can ever begin to exist without some productive principle; and where the latter proposition cannot be prov'd, we must despair of ever being able to prove the former. Now that the latter proposition is utterly incapable of a demonstrative proof, we may satisfy ourselves by considering, that as all distinct ideas are separable from each other, and as the ideas of cause and effect are evidently distinct, 'twill be easy for us to conceive any object to be non-existent this moment, and existent the next, without conjoining to it the distinct idea of a cause or productive principle. The separation, therefore, of the idea of a cause from that of a beginning of existence, is plainly possible for the imagination; and consequently the actual separation of these objects is so far possible, that it implies no contradiction nor absurdity; and is therefore incapable of being refuted by any reasoning from mere ideas; without which 'tis impossible to demonstrate the necessity of a cause.

Accordingly we shall find upon examination, that every demonstration, which has been produc'd for the necessity of a cause, is fallacious and sophistical. All the points of time and place,[1] say some philosophers, in which we can suppose any object to begin to exist, are in themselves equal; and unless there be some cause, which is peculiar to one time and to one place, and which by that means determines and fixes the existence, it must remain in eternal suspence; and

[1] Mr. *Hobbes.* [Of Liberty and Necessity, My Reasons, sixth point, vol. iv. p. 276, Molesworth's edition.—Ed.]

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the object can never begin to be, for want of something to fix its beginning. But I ask; Is there any more difficulty in supposing the time and place to be fix'd without a cause, than to suppose the existence to be determin'd in that manner? The first question that occurs on this subject is always, *whether* the object shall exist or not: The next, *when* and *where* it shall begin to exist. If the removal of a cause be intuitively absurd in the one case, it must be so in the other: And if that absurdity be not clear without a proof in the one case, it will equally require one in the other. The absurdity, then, of the one supposition can never be a proof of that of the other; since they are both upon the same footing, and must stand or fall by the same reasoning.

The second argument,[1] which I find us'd on this head, labours under an equal difficulty. Every thing, 'tis said, must have a cause; for if any thing wanted a cause, *it* wou'd produce *itself;* that is, exist before it existed; which is impossible. But this reasoning is plainly unconclusive; because it supposes, that in our denial of a cause we still grant what we expressly deny, *viz.* that there must be a cause; which therefore is taken to be the object itself; and *that*, no doubt, is an evident contradiction. But to say that any thing is produc'd, or to express myself more properly, comes into existence, without a cause, is not to affirm, that 'tis itself its own cause; but on the contrary in excluding all external causes, excludes *a fortiori* the thing itself, which is created. An object, that exists absolutely without any cause, certainly is not its own cause; and when you assert, that the one follows from the other, you suppose the very point in question, and take it for granted, that 'tis utterly impossible any thing can ever begin to exist without a cause, but that upon the exclusion of one productive principle, we must still have recourse to another.

'Tis exactly the same case with the[2] third argument, which has been employ'd to demonstrate the necessity of a cause. Whatever is produc'd without any cause, is produc'd by *nothing;* or in other words, has nothing for its cause. But nothing can never be a cause, no more than it can be something, or equal to two right angles. By the same intuition,

[1] Dr. *Clarke* and others. ['A Demonstration of the Being and Attributes of God.' Prop. I. & II.—Ed.]

[2] Mr. *Locke*. [See essay, IV. 10, § 3; cf. Introd. § 149.]

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that we perceive nothing not to be equal to two right angles, or not to be something, we perceive, that it can never be a cause; and consequently must perceive, that every object has a real cause of its existence.[1]

I believe it will not be necessary to employ many words in shewing the weakness of this argument, after what I have said of the foregoing. They are all of them founded on the same fallacy, and are deriv'd from the same turn of thought. 'Tis sufficient only to observe, that when we exclude all causes we really do exclude them, and neither suppose nothing nor the object itself to be the causes of the existence; and consequently can draw no argument from the absurdity of these suppositions to prove the absurdity of that exclusion. If every thing must have a cause, it follows, that upon the exclusion of other causes we must accept of the object itself or of nothing as causes. But 'tis the very point in question, whether every thing must have a cause or not; and therefore, according to all just reasoning, it ought never to be taken for granted.

They are still more frivolous, who say, that every effect must have a cause, because 'tis imply'd in the very idea of effect. Every effect necessarily pre-supposes a cause; effect being a relative term, of which cause is the correlative. But this does not prove, that every being must be preceded by a cause; no more than it follows, because every husband must have a wife, that therefore every man must be marry'd. The true state of the question is, whether every object, which begins to exist, must owe its existence to a cause; and this I assert neither to be intuitively nor demonstratively certain, and hope to have prov'd it sufficiently by the foregoing arguments.

Since it is not from knowledge or any scientific reasoning, that we derive the opinion of the necessity of a cause to every new production, that opinion must necessarily arise from observation and experience. The next question, then, shou'd naturally be, *how experience gives rise to such a principle?* But as I find it will be more convenient to sink this question in the following, *Why we conclude, that such particular causes must necessarily have such particular effects, and why we form an inference from one to another?* we shall make that the subject of our future enquiry. 'Twill, perhaps, be

[1] [See Introd. § 288.]

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found in the end, that the same answer will serve for both questions.

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SECT. IV.—*Of the Component Parts of our Reasonings Concerning Cause and Effect.*

Tho' the mind in its reasonings from causes or effects carries its view beyond those objects, which it sees or remembers, it must never lose sight of them entirely, nor reason merely upon its own ideas, without some mixture of impressions, or at least of ideas of the memory, which are equivalent to impressions. When we infer effects from causes, we must establish the existence of these causes; which we have only two ways of doing, either by an immediate perception of our memory or senses, or by an inference from other causes; which causes again we must ascertain in the same manner, either by a present impression, or by an inference from *their* causes, and so on, till we arrive at some object, which we see or remember.[1] 'Tis impossible for us to carry on our inferences *in infinitum;* and the only thing, that can stop them, is an impression of the memory or senses, beyond which there is no room for doubt or enquiry.

To give an instance of this, we may chuse any point of history, and consider for what reason we either believe or reject it. Thus we believe that CÆSAR was kill'd in the senate-house on the *ides* of *March;* and that because this fact is establish'd on the unanimous testimony of historians, who agree to assign this precise time and place to that event. Here are certain characters and letters present either to our memory or senses; which characters we likewise remember to have been us'd as the signs of certain ideas; and these ideas were either in the minds of such as were immediately present at that action, and receiv'd the ideas directly from its existence; or they were deriv'd from the testimony of others, and that again from another testimony, by a visible gradation, 'till we arrive at those who were eye-witnesses and spectators of the event. 'Tis obvious all this chain of argument or connexion of causes and effects, is at first founded on those characters or letters, which are seen or remember'd, and that without the authority either of the memory or senses our whole reasoning wou'd

[1] [See Introd. § 284.]

be chimerical and without foundation. Every link of the chain wou'd in that case hang upon another; but there wou'd not be any thing fix'd to one end of it, capable of sustaining the whole; and consequently there wou'd be no belief nor evidence. And this actually is the case with all *hypothetical* arguments, or reasonings upon a supposition; there being in them, neither any present impression, nor belief of a real existence.

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I need not observe, that 'tis no just objection to the present doctrine, that we can reason upon our past conclusions or principles, without having recourse to those impressions, from which they first arose. For even supposing these impressions shou'd be entirely effac'd from the memory, the conviction they produc'd may still remain; and 'tis equally true, that all reasonings concerning causes and effects are originally deriv'd from some impression; in the same manner, as the assurance of a demonstration proceeds always from a comparison of ideas, tho' it may continue after the comparison is forgot.

SECT. V.—*Of the Impressions of the Senses and Memory.*

In this kind of reasoning, then, from causation, we employ materials, which are of a mix'd and heterogeneous nature, and which, however connected, are yet essentially different from each other. All our arguments concerning causes and effects consist both of an impression of the memory or senses, and of the idea of that existence, which produces the object of the impression, or is produc'd by it. Here therefore we have three things to explain, *viz. First*, The original impression. *Secondly*, The transition to the idea of the connected cause or effect. *Thirdly*, The nature and qualities of that idea.[1]

As to those *impressions*, which arise from the *senses*, their ultimate cause is, in my opinion, perfectly inexplicable by human reason, and 'twill always be impossible to decide with certainty, whether they arise immediately from the object, or are produc'd by the creative power of the mind, or are deriv'd from the author of our being. Nor is such a question any way material to our present purpose. We may draw inferences from the coherence of our perceptions,

[1] [Ibid. § 290.]

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whether they be true or false; whether they represent nature justly, or be mere illusions of the senses.

When we search for the characteristic, which distinguishes the *memory* from the imagination, we must immediately perceive, that it cannot lie in the simple ideas it presents to us; since both these faculties borrow their simple ideas from the impressions, and can never go beyond these original perceptions. These faculties are as little distinguish'd from each other by the arrangement of their complex ideas. For tho' it be a peculiar property of the memory to preserve the original order and position of its ideas, while the imagination transposes and changes them, as it pleases; yet this difference is not sufficient to distinguish them in their operation, or make us know the one from the other; it being impossible to recal the past impressions, in order to compare them with our present ideas, and see whether their arrangement be exactly similar. Since therefore the memory is known, neither by the order of its *complex* ideas, nor the nature of its *simple* ones; it follows, that the difference betwixt it and the imagination lies in its superior force and vivacity. A man may indulge his fancy in feigning any past scene of adventures; nor wou'd there be any possibility of distinguishing this from a remembrance of a like kind, were not the ideas of the imagination fainter and more obscure.[1]

It frequently happens, that when two men have been engag'd in any scene of action, the one shall remember it much better than the other, and shall have all the difficulty in the world to make his companion recollect it. He runs over several circumstances in vain; mentions the time, the place, the company, what was said, what was done on all sides; till at last he hits on some lucky circumstance, that revives the whole, and gives his friend a perfect memory of every thing. Here the person that forgets receives at first all the ideas from the discourse of the other, with the same circumstances of time and place; tho' he considers them as mere fictions of the imagination. But as soon as the circumstance is mention'd, that touches the memory, the very same ideas now appear in a new light, and have, in a manner, a different feeling from what they had before. Without any other alteration, beside that of the feeling,

[1] [The two following paragraphs were added in the Appendix.—Ed.]

they become immediately ideas of the memory, and are assented to.

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Since, therefore, the imagination can represent all the same objects that the memory can offer to us, and since those faculties are only distinguish'd by the different *feeling* of the ideas they present, it may be proper to consider what is the nature of that feeling. And here I believe every one will readily agree with me, that the ideas of the memory are more *strong* and *lively* than those of the fancy.

A painter, who intended to represent a passion or emotion of any kind, wou'd endeavour to get a sight of a person actuated by a like emotion, in order to enliven his ideas, and give them a force and vivacity superior to what is found in those, which are mere fictions of the imagination. The more recent this memory is, the clearer is the idea; and when after a long interval he wou'd return to the contemplation of his object, he always finds its idea to be much decay'd, if not wholly obliterated. We are frequently in doubt concerning the ideas of the memory, as they become very weak and feeble; and are at a loss to determine whether any image proceeds from the fancy or the memory, when it is not drawn in such lively colours as distinguish that latter faculty. I think, I remember such an event, says one; but am not sure. A long tract of time has almost worn it out of my memory, and leaves me uncertain whether or not it be the pure offspring of my fancy.

And as an idea of the memory, by losing its force and vivacity, may degenerate to such a degree, as to be taken for an idea of the imagination; so on the other hand an idea of the imagination may acquire such a force and vivacity, as to pass for an idea of the memory, and counterfeit its effects on the belief and judgment. This is noted in the case of liars; who by the frequent repetition of their lies, come at last to believe and remember them, as realities; custom and habit having in this case, as in many others, the same influence on the mind as nature, and infixing the idea with equal force and vigour.

Thus it appears, that the *belief* or *assent*, which always attends the memory and senses, is nothing but the vivacity of those perceptions they present; and that this alone distinguishes them from the imagination. To believe is in this case to feel an immediate impression of the senses, or a

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repetition of that impression in the memory. 'Tis merely the force and liveliness of the perception, which constitutes the first act of the judgment, and lays the foundation of that reasoning, which we build upon it, when we trace the relation of cause and effect.

SECT. VI.—*Of the Inference from the Impression to the Idea.*

'Tis easy to observe, that in tracing this relation, the inference we draw from cause to effect, is not deriv'd merely from a survey of these particular objects, and from such a penetration into their essences as may discover the dependance of the one upon the other. There is no object, which implies the existence of any other if we consider these objects in themselves, and never look beyond the ideas which we form of them. Such an inference wou'd amount to knowledge, and wou'd imply the absolute contradiction and impossibility of conceiving any thing different. But as all distinct ideas are separable, 'tis evident there can be no impossibility of that kind. When we pass from a present impression to the idea of any object, we might possibly have separated the idea from the impression, and have substituted any other idea in its room.

'Tis therefore by EXPERIENCE only, that we can infer the existence of one object from that of another. The nature of experience is this. We remember to have had frequent instances of the existence of one species of objects; and also remember, that the individuals of another species of objects have always attended them, and have existed in a regular order of contiguity and succession with regard to them. Thus we remember, to have seen that species of object we call *flame*, and to have felt that species of sensation we call *heat*. We likewise call to mind their constant conjunction in all past instances. Without any farther ceremony, we call the one *cause* and the other *effect*, and infer the existence of the one from that of the other.[1] In all those instances, from which we learn the conjunction of particular causes and effects, both the causes and effects have been perceiv'd by the senses, and are remember'd: But in all cases, wherein we reason concerning them, there is only one perceiv'd or remember'd, and the other is supply'd in conformity to our past experience.

[1] [See Introd. §§ 284 and 311.]

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Thus in advancing we have insensibly discover'd a new relation betwixt cause and effect, when we least expected it, and were entirely employ'd upon another subject. This relation is their CONSTANT CONJUNCTION. Contiguity and succession are not sufficient to make us pronounce any two objects to be cause and effect, unless we perceive, that these two relations are preserv'd in several instances. We may now see the advantage of quitting the direct survey of this relation, in order to discover the nature of that *necessary connexion*, which makes so essential a part of it. There are hopes, that by this means we may at last arrive at our propos'd end; tho' to tell the truth, this new-discover'd relation of a constant conjunction seems to advance us but very little in our way. For it implies no more than this, that like objects have always been plac'd in like relations of contiguity and succession; and it seems evident, at least at first sight, that by this means we can never discover any new idea, and can only multiply, but not enlarge the objects of our mind. It may be thought, that what we learn not from one object, we can never learn from a hundred, which are all of the same kind, and are perfectly resembling in every circumstance. As our senses shew us in one instance two bodies, or motions, or qualities in certain relations of succession and contiguity; so our memory presents us only with a multitude of instances, wherein we always find like bodies, motions, or qualities in like relations. From the mere repetition of any past impression, even to infinity, there never will arise any new original idea, such as that of a necessary connexion; and the number of impressions has in this case no more effect than if we confin'd ourselves to one only. But tho' this reasoning seems just and obvious; yet as it wou'd be folly to despair too soon, we shall continue the thread of our discourse; and having found, that after the discovery of the constant conjunction of any objects, we always draw an inference from one object to another, we shall now examine the nature of that inference, and of the transition from the impression to the idea. Perhaps 'twill appear in the end, that the necessary connexion depends on the inference, instead of the inference's depending on the necessary connexion.

Since it appears, that the transition from an impression present to the memory or senses to the idea of an object, which we call cause or effect, is founded on past *experience*,

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and on our remembrance of their *constant conjunction*, the next question is, Whether experience produces the idea by means of the understanding or imagination; whether we are determin'd by reason to make the transition, or by a certain association and relation of perceptions. If reason determin'd us, it wou'd proceed upon that principle, *that instances, of which we have had no experience, must resemble those, of which we have had experience, and that the course of nature continues always uniformly the same.* In order therefore to clear up this matter, let us consider all the arguments, upon which such a proposition may be suppos'd to be founded; and as these must be deriv'd either from *knowledge* or *probability*, let us cast our eye on each of these degrees of evidence, and see whether they afford any just conclusion of this nature.

Our foregoing method of reasoning will easily convince us, that there can be no *demonstrative* arguments to prove, *that those instances, of which we have had no experience, resemble those, of which we have had experience.* We can at least conceive a change in the course of nature; which sufficiently proves, that such a change is not absolutely impossible. To form a clear idea of any thing, is an undeniable argument for its possibility, and is alone a refutation of any pretended demonstration against it.

Probability, as it discovers not the relations of ideas, consider'd as such, but only those of objects, must in some respects be founded on the impressions of our memory and senses, and in some respects on our ideas. Were there no mixture of any impression in our probable reasonings, the conclusion wou'd be entirely chimerical: And were there no mixture of ideas, the action of the mind, in observing the relation, wou'd, properly speaking, be sensation, not reasoning. 'Tis therefore necessary, that in all probable reasonings there be something present to the mind, either seen or remember'd; and that from this we infer something connected with it, which is not seen nor remember'd.

The only connexion or relation of objects, which can lead us beyond the immediate impressions of our memory and senses, is that of cause and effect; and that because 'tis the only one, on which we can found a just inference from one object to another. The idea of cause and effect is deriv'd from *experience*, which informs us, that such particular objects,

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in all past instances, have been constantly conjoin'd with each other: And as an object similar to one of these is suppos'd to be immediately present in its impression, we thence presume on the existence of one similar to its usual attendant. According to this account of things, which is, I think, in every point unquestionable, probability is founded on the presumption of a resemblance betwixt those objects, of which we have had experience, and those, of which we have had none; and therefore 'tis impossible this presumption can arise from probability. The same principle cannot be both the cause and effect of another; and this is, perhaps, the only proposition concerning that relation, which is either intuitively or demonstratively certain.

Shou'd any one think to elude this argument; and without determining whether our reasoning on this subject be deriv'd from demonstration or probability, pretend that all conclusions from causes and effects are built on solid reasoning: I can only desire, that this reasoning may be produc'd, in order to be expos'd to our examination. It may, perhaps, be said, that after experience of the constant conjunction of certain objects, we reason in the following manner. Such an object is always found to produce another. 'Tis impossible it cou'd have this effect, if it was not endow'd with a power of production. The power necessarily implies the effect; and therefore there is a just foundation for drawing a conclusion from the existence of one object to that of its usual attendant. The past production implies a power: The power implies a new production: And the new production is what we infer from the power and the past production.

'Twere easy for me to shew the weakness of this reasoning, were I willing to make use of those observations, I have already made, that the idea of *production* is the same with that of *causation*, and that no existence certainly and demonstratively implies a power in any other object; or were it proper to anticipate what I shall have occasion to remark afterwards concerning the idea we form of *power* and *efficacy*. But as such a method of proceeding may seem either to weaken my system, by resting one part of it on another, or to breed a confusion in my reasoning, I shall endeavour to maintain my present assertion without any such assistance.

It shall therefore be allow'd for a moment, that the pro-

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duction of one object by another in any one instance implies a power; and that this power is connected with its effect. But it having been already prov'd, that the power lies not in the sensible qualities of the cause; and there being nothing but the sensible qualities present to us; I ask, why in other instances you presume that the same power still exists, merely upon the appearance of these qualities? Your appeal to past experience decides nothing in the present case; and at the utmost can only prove, that that very object, which produc'd any other, was at that very instant endow'd with such a power; but can never prove, that the same power must continue in the same object or collection of sensible qualities; much less, that a like power is always conjoin'd with like sensible qualities. Shou'd it be said, that we have experience, that the same power continues united with the same object, and that like objects are endow'd with like powers, I wou'd renew my question, *why from this experience we form any conclusion beyond those past instances, of which we have had experience.* If you answer this question in the same manner as the preceding, your answer gives still occasion to a new question of the same kind, even *in infinitum*; which clearly proves, that the foregoing reasoning had no just foundation.

Thus not only our reason fails us in the discovery of the *ultimate connexion* of causes and effects, but even after experience has inform'd us of their *constant conjunction*, 'tis impossible for us to satisfy ourselves by our reason, why we shou'd extend that experience beyond those particular instances, which have fallen under our observation. We suppose, but are never able to prove, that there must be a resemblance betwixt those objects, of which we have had experience, and those which lie beyond the reach of our discovery.

We have already taken notice of certain relations, which make us pass from one object to another, even tho' there be no reason to determine us to that transition; and this we may establish for a general rule, that wherever the mind constantly and uniformly makes a transition without any reason, it is influenc'd by these relations. Now this is exactly the present case. Reason can never shew us the connexion of one object with another, tho' aided by experience, and the observation of their constant conjunction in all past instances. When the mind, therefore, passes

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from the idea or impression of one object to the idea or belief of another, it is not determin'd by reason, but by certain principles, which associate together the ideas of these objects, and unite them in the imagination. Had ideas no more union in the fancy than objects seem to have to the understanding, we cou'd never draw any inference from causes to effects, nor repose belief in any matter of fact. The inference, therefore, depends solely on the union of ideas.

The principles of union among ideas, I have reduc'd to three general ones, and have asserted, that the idea or impression of any object naturally introduces the idea of any other object, that is resembling, contiguous to, or connected with it. These principles I allow to be neither the *infallible* nor the *sole* causes of an union among ideas. They are not the infallible causes. For one may fix his attention during some time on any one object without looking farther. They are not the sole causes. For the thought has evidently a very irregular motion in running along its objects, and may leap from the heavens to the earth, from one end of the creation to the other, without any certain method or order. But tho' I allow this weakness in these three relations, and this irregularity in the imagination; yet I assert that the only *general* principles, which associate ideas, are resemblance, contiguity and causation.

There is indeed a principle of union among ideas, which at first sight may be esteem'd different from any of these, but will be found at the bottom to depend on the same origin. When ev'ry individual of any species of objects is found by experience to be constantly united with an individual of another species, the appearance of any new individual of either species naturally conveys the thought to its usual attendant. Thus because such a particular idea is commonly annex'd to such a particular word, nothing is requir'd but the hearing of that word to produce the correspondent idea; and 'twill scarce be possible for the mind, by its utmost efforts, to prevent that transition. In this case it is not absolutely necessary, that upon hearing such a particular sound, we shou'd reflect on any past experience, and consider what idea has been usually connected with the sound. The imagination of itself supplies the place of this reflection, and is so accustom'd to pass from the word to the

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idea, that it interposes not a moment's delay betwixt the hearing of the one, and the conception of the other.

But tho' I acknowledge this to be a true principle of association among ideas, I assert it to be the very same with that betwixt the ideas of cause and effect, and to be an essential part in all our reasonings from that relation. We have no other notion of cause and effect, but that of certain objects, which have been *always conjoin'd* together, and which in all past instances have been found inseparable. We cannot penetrate into the reason of the conjunction. We only observe the thing itself, and always find that from the constant conjunction the objects acquire an union in the imagination. When the impression of one becomes present to us, we immediately form an idea of its usual attendant; and consequently we may establish this as one part of the definition of an opinion or belief, that 'tis *an idea related to or associated with a present impression.*

Thus tho' causation be a *philosophical* relation, as implying contiguity, succession, and constant conjunction, yet 'tis only so far as it is a *natural* relation, and produces an union among our ideas, that we are able to reason upon it, or draw any inference from it.[1]

SECT. VII.—*Of the Nature of the Idea or Belief.*

The idea of an object is an essential part of the belief of it, but not the whole. We conceive many things, which we do not believe. In order then to discover more fully the nature of belief, or the qualities of those ideas we assent to, let us weigh the following considerations.

'Tis evident, that all reasonings from causes or effects terminate in conclusions, concerning matter of fact; that is, concerning the existence of objects or of their qualities. 'Tis also evident, that the idea of existence is nothing different from the idea of any object, and that when after the simple conception of any thing we wou'd conceive it as existent, we in reality make no addition to or alteration on our first idea. Thus when we affirm, that God is existent, we simply form the idea of such a being, as he is represented to us; nor is the existence, which we attribute to him, conceiv'd by a particular idea, which we join to the idea of

[1] [See Introd. §§ 316 and ff.]

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his other qualities, and can again separate and distinguish from them. But I go farther; and not content with asserting, that the conception of the existence of any object is no addition to the simple conception of it, I likewise maintain, that the belief of the existence joins no new ideas to those, which compose the idea of the object. When I think of God, when I think of him as existent, and when I believe him to be existent, my idea of him neither encreases nor diminishes.[1] But as 'tis certain there is a great difference betwixt the simple conception of the existence of an object, and the belief of it, and as this difference lies not in the parts or composition of the idea, which we conceive; it follows, that it must lie in the *manner*, in which we conceive it.[2]

Suppose a person present with me, who advances propositions, to which I do not assent, *that* Cæsar *dy'd in his bed, that silver is more fusible than lead, or mercury heavier than gold;* 'tis evident, that notwithstanding my incredulity, I clearly understand his meaning, and form all the same ideas, which he forms. My imagination is endow'd with the same powers as his; nor is it possible for him to conceive any idea, which I cannot conceive; nor conjoin any, which I cannot conjoin. I therefore ask, Wherein consists the difference betwixt believing and disbelieving any proposition? The answer is easy with regard to propositions, that are prov'd by intuition or demonstration. In that case, the person, who assents, not only conceives the ideas according to the proposition, but is necessarily determin'd to conceive them in that particular manner, either immediately or by the interposition of other ideas. Whatever is absurd is unintelligible; nor is it possible for the imagination to conceive any thing contrary to a demonstration. But as in reasonings from causation, and concerning matters of fact, this absolute necessity cannot take place, and the imagination is free to conceive both sides of the question, I still ask, *Wherein consists the difference betwixt incredulity and belief?* since in both cases the conception of the idea is equally possible and requisite.

'Twill not be a satisfactory answer to say, that a person, who does not assent to a proposition you advance; after having conceiv'd the object in the same manner with you; imme-

[1] [Cf. Locke, Essay IV. i. § 7; and Kant, 'Kritik der reinen Vernunft,' p. 409, ed. Hartenstein.]

[2] [See Introd. § 291.]

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diately conceives it in a different manner, and has different ideas of it. This answer is unsatisfactory; not because it contains any falshood, but because it discovers not all the truth. 'Tis confest, that in all cases, wherein we dissent from any person, we conceive both sides of the question; but as we can believe only one, it evidently follows, that the belief must make some difference betwixt that conception to which we assent, and that from which we dissent. We may mingle, and unite, and separate, and confound, and vary our ideas in a hundred different ways; but 'till there appears some principle, which fixes one of these different situations, we have in reality no opinion: And this principle, as it plainly makes no addition to our precedent ideas, can only change the *manner* of our conceiving them.

All the perceptions of the mind are of two kinds, *viz.* impressions and ideas, which differ from each other only in their different degrees of force and vivacity.[1] Our ideas are copy'd from our impressions, and represent them in all their parts. When you wou'd any way vary the idea of a particular object, you can only encrease or diminish its force and vivacity. If you make any other change on it, it represents a different object or impression. The case is the same as in colours. A particular shade of any colour may acquire a new degree of liveliness or brightness without any other variation. But when you produce any other variation, 'tis no longer the same shade or colour. So that as belief does nothing but vary the manner, in which we conceive any object, it can only bestow on our ideas an additional force and vivacity. An opinion, therefore, or belief may be most accurately defined, A LIVELY IDEA RELATED TO OR ASSOCIATED WITH A PRESENT IMPRESSION.[2]

[1] [In the Appendix this statement is corrected. See last page, and the note there added.]

[2] We may here take occasion to observe a very remarkable error, which being frequently inculcated in the schools, has become a kind of establish'd maxim, and is universally received by all logicians. This error consists in the vulgar division of the acts of the understanding, into *conception*, *judgment* and *reasoning*, and in the definitions we give of them. Conception is defin'd to be the simple survey of one or more ideas: Judgment to be the separating or uniting of different ideas: Reasoning to be the separating or uniting of different ideas by the interposition of others, which show the relation they bear to each other. But these distinctions and definitions are faulty in very considerable articles. For *first*, 'tis far from being true, that in every judgment, which we form, we unite two different ideas; since in that proposition, *God is*, or indeed any other, which regards existence, the idea of existence is no distinct idea, which we unite with that of the object, and which is capable of forming a compound idea by the union. *Secondly*, As we can thus form

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Here are the heads of those arguments, which lead us to this conclusion. When we infer the existence of an object from that of others, some object must always be present either to the memory or senses, in order to be the foundation of our reasoning; since the mind cannot run up with its inferences *in infinitum*. Reason can never satisfy us that the existence of any one object does ever imply that of another; so that when we pass from the impression of one to the idea or belief of another, we are not determin'd by reason, but by custom or a principle of association. But belief is somewhat more than a simple idea. 'Tis a particular manner of forming an idea: And as the same idea can only be vary'd by a variation of its degrees of force and vivacity; it follows upon the whole, that belief is a lively idea produc'd by a relation to a present impression, according to the foregoing definition.[1]

This operation of the mind, which forms the belief of any matter of fact, seems hitherto to have been one of the greatest mysteries of philosophy; tho' no one has so much as suspected, that there was any difficulty in explaining it. For my part I must own, that I find a considerable difficulty in the case; and that even when I think I understand the subject perfectly, I am at a loss for terms to express my meaning. I conclude, by an induction which seems to me very evident, that an opinion or belief is nothing but an idea, that is different from a fiction, not in the nature, or the order of its parts, but in the *manner* of its being conceiv'd. But when I wou'd explain this *manner*, I scarce find any word that fully answers the case, but am oblig'd to have

a proposition, which contains only one idea, so we may exert our reason without employing more than two ideas, and without having recourse to a third to serve as a medium betwixt them. We infer a cause immediately from its effect; and this inference is not only a true species of reasoning, but the strongest of all others, and more convincing than when we interpose another idea to connect the two extremes. What we may in general affirm concerning these three acts of the understanding is, that taking them in a proper light, they all resolve themselves into the first, and are nothing but particular ways of conceiving our objects. Whether we consider a single object, or several; whether we dwell on these objects, or run from them to others; and in whatever form or order we survey them, the act of the mind exceeds not a simple conception; and the only remarkable difference, which occurs on this occasion, is, when we join belief to the conception, and are perswaded of the truth of what we conceive. This act of the mind has never yet been explain'd by any philosopher; and therefore I am at liberty to propose my hypothesis concerning it; which is, that 'tis only a strong and steady conception of any idea, and such as approaches in some measure to an immediate impression.

[1] [The following paragraph was added in the Appendix.—Ed.]

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recourse to every one's feeling, in order to give him a perfect notion of this operation of the mind. An idea assented to *feels* different from a fictitious idea, that the fancy alone presents to us: And this different feeling I endeavour to explain by calling it a superior *force*, or *vivacity*, or *solidity*, or *firmness*, or *steadiness*. This variety of terms, which may seem so unphilosophical, is intended only to express that act of the mind, which renders realities more present to us than fictions, causes them to weigh more in the thought, and gives them a superior influence on the passions and imagination. Provided we agree about the thing, 'tis needless to dispute about the terms. The imagination has the command over all its ideas, and can join, and mix, and vary them in all the ways possible. It may conceive objects with all the circumstances of place and time. It may set them, in a manner, before our eyes in their true colours, just as they might have existed. But as it is impossible, that that faculty can ever, of itself, reach belief, 'tis evident, that belief consists not in the nature and order of our ideas, but in the manner of their conception, and in their feeling to the mind. I confess, that 'tis impossible to explain perfectly this feeling or manner of conception. We may make use of words that express something near it. But its true and proper name is *belief*, which is a term that every one sufficiently understands in common life. And in philosophy we can go no farther, than assert, that it is something *felt* by the mind, which distinguishes the ideas of the judgment from the fictions of the imagination. It gives them more force and influence; makes them appear of greater importance; infixes them in the mind; and renders them the governing principles of all our actions.

This definition will also be found to be entirely conformable to every one's feeling and experience. Nothing is more evident, than that those ideas, to which we assent, are more strong, firm and vivid, than the loose reveries of a castle-builder. If one person sits down to read a book as a romance, and another as a true history, they plainly receive the same ideas, and in the same order; nor does the incredulity of the one, and the belief of the other hinder them from putting the very same sense upon their author. His words produce the same ideas in both; tho' his testimony has not the same influence on them. The latter has a more

lively conception of all the incidents. He enters deeper into the concerns of the persons: represents to himself their actions, and characters, and friendships, and enmities: He even goes so far as to form a notion of their features, and air, and person. While the former, who gives no credit to the testimony of the author, has a more faint and languid conception of all these particulars; and except on account of the style and ingenuity of the composition, can receive little entertainment from it.

SECT. VII

Of the nature of the idea or belief.

SECT. VIII.—*Of the Causes of Belief.*

Having thus explain'd the nature of belief, and shewn that it consists in a lively idea related to a present impression; let us now proceed to examine from what principles it is deriv'd, and what bestows the vivacity on the idea.

I wou'd willingly establish it as a general maxim in the science of human nature, *that when any impression becomes present to us, it not only transports the mind to such ideas as are related to it, but likewise communicates to them a share of its force and vivacity.* All the operations of the mind depend in a great measure on its disposition, when it performs them; and according as the spirits are more careless elevated, and the attention more or less fix'd, the action will always have more or less vigour and vivacity. When therefore any object is presented, which elevates and enlivens the thought, every action, to which the mind applies itself, will be more strong and vivid, as long as that disposition continues. Now 'tis evident the continuance of the disposition depends entirely on the objects, about which the mind is employ'd; and that any new object naturally gives a new direction to the spirits, and changes the disposition; as on the contrary, when the mind fixes constantly on the same object, or passes easily and insensibly along related objects, the disposition has a much longer duration. Hence it happens, that when the mind is once inliven'd by a present impression, it proceeds to form a more lively idea of the related objects, by a natural transition of the disposition from the one to the other. The change of the objects is so easy, that the mind is scarce sensible of it, but applies itself to the conception of the related idea with all the force and vivacity it acquir'd from the present impression.

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If in considering the nature of relation, and that facility of transition, which is essential to it, we can satisfy ourselves concerning the reality of this phænomenon, 'tis well: But I must confess I place my chief confidence in experience to prove so material a principle. We may, therefore, observe, as the first experiment to our present purpose, that upon the appearance of the picture of an absent friend, our idea of him is evidently inliven'd by the *resemblance*, and that every passion, which that idea occasions, whether of joy or sorrow, acquires new force and vigour. In producing this effect there concur both a relation and a present impression. Where the picture bears him no resemblance, or at least was not intended for him, it never so much as conveys our thought to him: And where it is absent, as well as the person; tho' the mind may pass from the thought of the one to that of the other; it feels its idea to be rather weaken'd than inliven'd by that transition. We take a pleasure in viewing the picture of a friend, when 'tis set before us; but when 'tis remov'd, rather choose to consider him directly, than by reflexion in an image, which is equally distant and obscure.

The ceremonies of the *Roman Catholic* religion may be consider'd as experiments of the same nature. The devotees of that strange superstition usually plead in excuse of the mummeries, with which they are upbraided, that they feel the good effect of those external motions, and postures, and actions, in inlivening their devotion, and quickening their fervour, which otherwise wou'd decay away, if directed entirely to distant and immaterial objects. We shadow out the objects of our faith, say they, in sensible types and images, and render them more present to us by the immediate presence of these types, than 'tis possible for us to do, merely by an intellectual view and contemplation. Sensible objects have always a greater influence on the fancy than any other; and this influence they readily convey to those ideas, to which they are related, and which they resemble. I shall only infer from these practices, and this reasoning, that the effect of resemblance in inlivening the idea is very common; and as in every case a resemblance and a present impression must concur, we are abundantly supply'd with experiments to prove the reality of the foregoing principle.

We may add force to these experiments by others of a

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different kind, in considering the effects of *contiguity*, as well as of *resemblance*. 'Tis certain, that distance diminishes the force of every idea, and that upon our approach to any object; tho' it does not discover itself to our senses; it operates upon the mind with an influence that imitates an immediate impression. The thinking on any object readily transports the mind to what is contiguous; but 'tis only the actual presence of an object, that transports it with a superior vivacity. When I am a few miles from home, whatever relates to it touches me more nearly than when I am two hundred leagues distant; tho' even at that distance the reflecting on any thing in the neighbourhood of my friends and family naturally produces an idea of them. But as in this latter case, both the objects of the mind are ideas; notwithstanding there is an easy transition betwixt them; that transition alone is not able to give a superior vivacity to any of the ideas, for want of some immediate impression.[1]

No one can doubt but causation has the same influence as the other two relations of resemblance and contiguity. Superstitious people are fond of the relicks of saints and holy men, for the same reason that they seek after types and images, in order to inliven their devotion, and give them a more intimate and strong conception of those exemplary lives, which they desire to imitate. Now 'tis evident, one of the best relicks a devotee cou'd procure, wou'd be the handy-work of a saint; and if his cloaths and furniture are ever to be consider'd in this light, 'tis because they were once at his disposal, and were mov'd and affected by him; in which respect they are to be consider'd as imperfect effects, and as connected with him by a shorter chain of consequences than any of those, from which we learn the reality of his existence. This phænomenon clearly proves, that a present impression

[1] [The following note was added in the Appendix.—Ed.]

Naturane nobis, inquit, datum dicam, an errore quodam, ut, cum ea loca videamus, in quibus memoria dignos viros acceperimus multum esse versatos, magis moveamur, quam siquando eorum ipsorum aut facta audiamus, aut scriptum aliquod legamus? velut ego nunc moveor. Venit enim mihi Platonis in mentem: quem accipimus primum hîc disputare solitum: Cujus etiam illi hortuli propinqui non memoriam solûm mihi afferunt, sed ipsum videntur in conspectu meo hic ponere. Hîc Speusippus, hic Xenocrates, hic ejus auditor Polemo; cujus ipsa illa sessio fuit, quam videamus. Equidem etiam curiam nostram, hostiliam dico, non hanc novam, quæ mihi minor esse videtur postquam est major, solebam intuens Scipionem, Catonem, Lælium, nostrum vero in primis avum cogitare. Tanta vis admonitionis inest in locis; ut non sine causa ex his memoriæ ducta sit diciplina.—Cicero de Finibus, lib. 5.

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with a relation of causation may inliven any idea, and consequently produce belief or assent, according to the precedent definition of it.

But why need we seek for other arguments to prove, that a present impression with a relation or transition of the fancy may inliven any idea, when this very instance of our reasonings from cause and effect will alone suffice to that purpose? 'Tis certain we must have an idea of every matter of fact, which we believe. 'Tis certain, that this idea arises only from a relation to a present impression. 'Tis certain, that the belief super-adds nothing to the idea, but only changes our manner of conceiving it, and renders it more strong and lively. The present conclusion concerning the influence of relation is the immediate consequence of all these steps; and every step appears to me sure and infallible. There enters nothing into this operation of the mind but a present impression, a lively idea, and a relation or association in the fancy betwixt the impression and idea; so that there can be no suspicion of mistake.

In order to put this whole affair in a fuller light, let us consider it as a question in natural philosophy, which we must determine by experience and observation. I suppose there is an object presented, from which I draw a certain conclusion, and form to myself ideas, which I am said to believe or assent to. Here 'tis evident, that however that object, which is present to my senses, and that other, whose existence I infer by reasoning, may be thought to influence each other by their particular powers or qualities; yet as the phænomenon of belief, which we at present examine, is merely internal, these powers and qualities, being entirely unknown, can have no hand in producing it. 'Tis the present impression, which is to be consider'd as the true and real cause of the idea, and of the belief which attends it. We must therefore endeavour to discover by experiments the particular qualities, by which 'tis enabled to produce so extraordinary an effect.

First then I observe, that the present impression has not this effect by its own proper power and efficacy, and when consider'd alone, as a single perception, limited to the present moment. I find, that an impression, from which, on its first appearance, I can draw no conclusion, may afterwards become the foundation of belief, when I have had

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experience of its usual consequences. We must in every case have observ'd the same impression in past instances, and have found it to be constantly conjoin'd with some other impression. This is confirm'd by such a multitude of experiments, that it admits not of the smallest doubt.

From a second observation I conclude, that the belief, which attends the present impression, and is produc'd by a number of past impressions and conjunctions; that this belief, I say, arises immediately, without any new operation of the reason or imagination. Of this I can be certain, because I never am conscious of any such operation, and find nothing in the subject, on which it can be founded. Now as we call every thing CUSTOM, which proceeds from a past repetition, without any new reasoning or conclusion, we may establish it as a certain truth, that all the belief, which follows upon any present impression, is deriv'd solely from that origin. When we are accustom'd to see two impressions conjoin'd together, the appearance or idea of the one immediately carries us to the idea of the other.

Being fully satisfy'd on this head, I make a third set of experiments, in order to know, whether any thing be requisite, beside the customary transition, towards the production of this phænomenon of belief. I therefore change the first impression into an idea; and observe, that tho' the customary transition to the correlative idea still remains, yet there is in reality no belief nor perswasion. A present impression, then, is absolutely requisite to this whole operation; and when after this I compare an impression with an idea, and find that their only difference consists in their different degrees of force and vivacity, I conclude upon the whole, that belief is a more vivid and intense conception of an idea, proceeding from its relation to a present impression.

Thus all probable reasoning is nothing but a species of sensation.[1] 'Tis not solely in poetry and music, we must follow our taste and sentiment, but likewise in philosophy. When I am convinc'd of any principle, 'tis only an idea, which strikes more strongly upon me. When I give the preference to one set of arguments above another, I do nothing but decide from my feeling concerning the superiority of their influence. Objects have no discoverable connexion together; nor is it

[1] [Cf. pp. 471 and 475, and Introd. § 293.]

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from any other principle but custom operating upon the imagination, that we can draw any inference from the appearance of one to the existence of another.

'Twill here be worth our observation, that the past experience, on which all our judgments concerning cause and effect depend, may operate on our mind in such an insensible manner as never to be taken notice of, and may even in some measure be unknown to us. A person, who stops short in his journey upon meeting a river in his way, foresees the consequences of his proceeding forward; and his knowledge of these consequences is convey'd to him by past experience, which informs him of such certain conjunctions of causes and effects. But can we think, that on this occasion he reflects on any past experience, and calls to remembrance instances, that he has seen or heard of, in order to discover the effects of water on animal bodies? No surely; this is not the method, in which he proceeds in his reasoning. The idea of sinking is so closely connected with that of water, and the idea of suffocating with that of sinking, that the mind makes the transition without the assistance of the memory. The custom operates before we have time for reflection. The objects seem so inseparable, that we interpose not a moment's delay in passing from the one to the other. But as this transition proceeds from experience, and not from any primary connexion betwixt the ideas, we must necessarily acknowledge, that experience may produce a belief and a judgment of causes and effects by a secret operation, and without being once thought of. This removes all pretext, if there yet remains any, for asserting that the mind is convinc'd by reasoning of that principle, *that instances of which we have no experience, must necessarily resemble those, of which we have.* For we here find, that the understanding or imagination can draw inferences from past experience, without reflecting on it; much more without forming any principle concerning it, or reasoning upon that principle.

In general we may observe, that in all the most establish'd and uniform conjunctions of causes and effects, such as those of gravity, impulse, solidity, &c. the mind never carries its view expressly to consider any past experience: Tho' in other associations of objects, which are more rare and unusual, it may assist the custom and transition of ideas

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by this reflection. Nay we find in some cases, that the reflection produces the belief without the custom; or more properly speaking, that the reflection produces the custom in an *oblique* and *artificial* manner. I explain myself. 'Tis certain, that not only in philosophy, but even in common life, we may attain the knowledge of a particular cause merely by one experiment, provided it be made with judgment, and after a careful removal of all foreign and superfluous circumstances. Now as after one experiment of this kind, the mind, upon the appearance either of the cause or the effect, can draw an inference concerning the existence of its correlative; and as a habit can never be acquir'd merely by one instance; it may be thought, that belief cannot in this case be esteem'd the effect of custom. But this difficulty will vanish, if we consider, that tho' we are here suppos'd to have had only one experiment of a particular effect, yet we have many millions to convince us of this principle; *that like objects, plac'd in like circumstances, will always produce like effects;* and as this principle has establish'd itself by a sufficient custom, it bestows an evidence and firmness on any opinion, to which it can be apply'd. The connexion of the ideas is not habitual after one experiment; but this connexion is comprehended under another principle, that is habitual; which brings us back to our hypothesis. In all cases we transfer our experience to instances, of which we have no experience, either *expressly* or *tacitly*, either *directly* or *indirectly*.

I must not conclude this subject without observing, that 'tis very difficult to talk of the operations of the mind with perfect propriety and exactness; because common language has seldom made any very nice distinctions among them, but has generally call'd by the same term all such as nearly resemble each other. And as this is a source almost inevitable of obscurity and confusion in the author; so it may frequently give rise to doubts and objections in the reader, which otherwise he wou'd never have dream'd of. Thus my general position, that an opinion or belief is *nothing but a strong and lively idea deriv'd from a present impression related to it*, may be liable to the following objection, by reason of a little ambiguity in those words *strong and lively*. It may be said, that not only an impression may give rise to reasoning, but that an idea may also have the same influence; especially

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upon my principle, *that all our ideas are deriv'd from correspondent impressions.* For suppose I form at present an idea, of which I have forgot the correspondent impression, I am able to conclude from this idea, that such an impression did once exist; and as this conclusion is attended with belief, it may be ask'd, from whence are the qualities of force and vivacity deriv'd, which constitute this belief? And to this I answer very readily, *from the present idea.* For as this idea is not here consider'd, as the representation of any absent object, but as a real perception in the mind, of which we are intimately conscious, it must be able to bestow on whatever is related to it the same quality, call it *firmness, or solidity, or force, or vivacity,* with which the mind reflects upon it, and is assur'd of its present existence. The idea here supplies the place of an impression, and is entirely the same, so far as regards our present purpose.

Upon the same principles we need not be surpriz'd to hear of the remembrance of an idea; that is, of the idea of an idea, and of its force and vivacity superior to the loose conceptions of the imagination. In thinking of our past thoughts we not only delineate out the objects, of which we were thinking, but also conceive the action of the mind in the meditation, that certain *je-ne-scai-quoi,* of which 'tis impossible to give any definition or description, but which every one sufficiently understands. When the memory offers an idea of this, and represents it as past, 'tis easily conceiv'd how that idea may have more vigour and firmness, than when we think of a past thought, of which we have no remembrance.

After this any one will understand how we may form the idea of an impression and of an idea, and how we may believe the existence of an impression and of an idea.[1]

SECT. IX.—*Of the Effects of other Relations and other Habits.*

However convincing the foregoing arguments may appear, we must not rest contented with them, but must turn the subject on every side, in order to find some new points of view, from which we may illustrate and confirm such extraordinary, and such fundamental principles. A scrupulous

[1] [The nature of Belief is further discussed in the first division of the Appendix, p. 555.—ED.]

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hesitation to receive any new hypothesis is so laudable a disposition in philosophers, and so necessary to the examination of truth, that it deserves to be comply'd with, and requires that every argument be produc'd, which may tend to their satisfaction, and every objection remov'd, which may stop them in their reasoning.

I have often observ'd, that, beside cause and effect, the two relations of resemblance and contiguity, are to be consider'd as associating principles of thought, and as capable of conveying the imagination from one idea to another. I have also observ'd, that when of two objects connected together by any of these relations, one is immediately present to the memory or senses, not only the mind is convey'd to its co-relative by means of the associating principle; but likewise conceives it with an additional force and vigour, by the united operation of that principle, and of the present impression. All this I have observ'd, in order to confirm by analogy, my explication of our judgments concerning cause and effect. But this very argument may, perhaps, be turn'd against me, and instead of a confirmation of my hypothesis, may become an objection to it. For it may be said, that if all the parts of that hypothesis be true, *viz. that* these three species of relation are deriv'd from the same principles; *that* their effects in inforcing and inlivening our ideas are the same; and *that* belief is nothing but a more forcible and vivid conception of an idea; it shou'd follow, that that action of the mind may not only be deriv'd from the relation of cause and effect, but also from those of contiguity and resemblance. But as we find by experience, that belief arises only from causation,[1] and that we can draw no inference from one object to another, except they be connected by this relation, we may conclude, that there is some error in that reasoning, which leads us into such difficulties.

This is the objection; let us now consider its solution. 'Tis evident, that whatever is present to the memory, striking upon the mind with a vivacity, which resembles an immediate impression, must become of considerable moment in all the operations of the mind, and must easily distinguish itself above the mere fictions of the imagination. Of these impressions or ideas of the memory we form a kind of system, comprehending whatever we remember to have been present,

[1] [Introd. § 326 and ff.]

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either to our internal perception or senses; and every particular of that system, join'd to the present impressions, we are pleas'd to call a *reality*. But the mind stops not here. For finding, that with this system of perceptions, there is another connected by custom, or if you will, by the relation of cause or effect, it proceeds to the consideration of their ideas; and as it feels that 'tis in a manner necessarily determin'd to view these particular ideas, and that the custom or relation, by which it is determin'd, admits not of the least change, it forms them into a new system, which it likewise dignifies with the title of *realities*. The first of these systems is the object of the memory and senses; the second of the judgment.[1]

'Tis this latter principle, which peoples the world, and brings us acquainted with such existences, as by their removal in time and place, lie beyond the reach of the senses and memory.[2] By means of it I paint the universe in my imagination, and fix my attention on any part of it I please. I form an idea of ROME, which I neither see nor remember; but which is connected with such impressions as I remember to have received from the conversation and books of travellers and historians. This idea of *Rome* I place in a certain situation on the idea of an object, which I call the globe. I join to it the conception of a particular government, and religion, and manners. I look backward and consider its first foundation; its several revolutions, successes, and misfortunes. All this, and everything else, which I believe, are nothing but ideas; tho' by their force and settled order, arising from custom and the relation of cause and effect, they distinguish themselves from the other ideas, which are merely the offspring of the imagination.

As to the influence of contiguity and resemblance, we may observe, that if the contiguous and resembling object be comprehended in this system of realities, there is no doubt but these two relations will assist that of cause and effect, and infix the related idea with more force in the imagination. This I shall enlarge upon presently. Mean while I shall carry my observation a step farther, and assert, that even where the related object is but feign'd, the relation will serve to enliven the idea, and encrease its influence. A

[1] [Cf. note on p. 396.]

[2] [Introd. § 328 and ff.]

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poet, no doubt, will be the better able to form a strong description of the *Elysian* fields, that he prompts his imagination by the view of a beautiful meadow or garden; as at another time he may by his fancy place himself in the midst of these fabulous regions, that by the feign'd contiguity he may enliven his imagination.

But tho' I cannot altogether exclude the relations of resemblance and contiguity from operating on the fancy in this manner, 'tis observable that, when single, their influence is very feeble and uncertain. As the relation of cause and effect is requisite to persuade us of any real existence,[1] so is this persuasion requisite to give force to these other relations. For where upon the appearance of an impression we not only feign another object, but likewise arbitrarily, and of our mere good-will and pleasure give it a particular relation to the impression, this can have but a small effect upon the mind; nor is there any reason, why, upon the return of the same impression, we shou'd be determin'd to place the same object in the same relation to it.[2] There is no manner of necessity for the mind to feign any resembling and contiguous objects; and if it feigns such, there is as little necessity for it always to confine itself to the same, without any difference or variation. And indeed such a fiction is founded on so little reason, that nothing but pure *caprice* can determine the mind to form it;[3] and that principle being fluctuating and uncertain, 'tis impossible it can ever operate with any considerable degree of force and constancy. The mind forsees and anticipates the change; and even from the very first instant feels the looseness of its actions, and the weak hold it has of its objects. And as this imperfection is very sensible in every single instance, it still encreases by experience and observation, when we compare the several instances we may remember, and form a *general rule* against the reposing any assurance in those momentary glimpses of light, which arise in the imagination from a feign'd resemblance and contiguity.

The relation of cause and effect has all the opposite advantages. The objects it presents are fixt and unalterable. The impressions of the memory never change in any considerable degree; and each impression draws along with it a precise idea, which takes its place in the imagination as

[1] [Introd. § 326 and ff.] [2] [Introd. § 330.] [3] [Introd. § 332.]

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something solid and real, certain and invariable. The thought is always determin'd to pass from the impression to the idea, and from that particular impression to that particular idea, without any choice or hesitation.

But not content with removing this objection, I shall endeavour to extract from it a proof of the present doctrine. Contiguity and resemblance have an effect much inferior to causation; but still have some effect, and augment the conviction of any opinion, and the vivacity of any conception. If this can be prov'd in several new instances, beside what we have already observ'd, 'twill be allow'd no inconsiderable argument, that belief is nothing but a lively idea related to a present impression.

To begin with contiguity; it has been remark'd among the *Mahometans* as well as *Christians*, that those *pilgrims*, who have seen MECCA or the HOLY LAND, are ever after more faithful and zealous believers, than those who have not had that advantage. A man, whose memory presents him with a lively image of the *Red-Sea, and the Desert, and Jerusalem, and Galilee*, can never doubt of any miraculous events, which are related either by *Moses or the Evangelists*. The lively idea of the places passes by an easy transition to the facts, which are suppos'd to have been related to them by contiguity, and encreases the belief by encreasing the vivacity of the conception. The remembrance of these fields and rivers has the same influence on the vulgar as a new argument; and from the same causes.

We may form a like observation concerning *resemblance*. We have remark'd, that the conclusion, which we draw from a present object to its absent cause or effect, is never founded on any qualities, which we observe in that object, consider'd in itself, or, in other words, that 'tis impossible to determine, otherwise than by experience, what will result from any phænomenon, or what has preceded it. But tho' this be so evident in itself, that it seem'd not to require any proof; yet some philosophers have imagin'd that there is an apparent cause for the communication of motion, and that a reasonable man might immediately infer the motion of one body from the impulse of another, without having recourse to any past observation. That this opinion is false will admit of an easy proof. For if such an inference may be drawn merely from the ideas of body, of motion, and of

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impulse, it must amount to a demonstration, and must imply the absolute impossibility of any contrary supposition. Every effect, then, beside the communication of motion, implies a formal contradiction; and 'tis impossible not only that it can exist, but also that it can be conceiv'd. But we may soon satisfy ourselves of the contrary, by forming a clear and consistent idea of one body's moving upon another, and of its rest immediately upon the contact; or of its returning back in the same line in which it came; or of its annihilation; or circular or elliptical motion: and in short, of an infinite number of other changes, which we may suppose it to undergo. These suppositions are all consistent and natural; and the reason, why we imagine the communication of motion to be more consistent and natural not only than those suppositions, but also than any other natural effect, is founded on the relation of *resemblance* betwixt the cause and effect, which is here united to experience, and binds the objects in the closest and most intimate manner to each other, so as to make us imagine them to be absolutely inseparable. Resemblance, then, has the same or a parallel influence with experience; and as the only immediate effect of experience is to associate our ideas together, it follows, that all belief arises from the association of ideas, according to my hypothesis.

'Tis universally allow'd by the writers on optics, that the eye at all times sees an equal number of physical points, and that a man on the top of a mountain has no larger an image presented to his senses, than when he is coop'd up in the narrowest court or chamber. 'Tis only by experience that he infers the greatness of the object from some peculiar qualities of the image; and this inference of the judgment he confounds with sensation, as is common on other occasions. Now 'tis evident, that the inference of the judgment is here much more lively than what is usual in our common reasonings, and that a man has a more vivid conception of the vast extent of the ocean from the image he receives by the eye, when he stands on the top of the high promontory, than merely from hearing the roaring of the waters. He feels a more sensible pleasure from its magnificence; which is a proof of a more lively idea: And he confounds his judgment with sensation; which is another proof of it. But as the inference is equally certain and immediate in both

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cases, this superior vivacity of our conception in one case can proceed from nothing but this, that in drawing an inference from the sight, beside the customary conjunction, there is also a resemblance betwixt the image and the object we infer; which strengthens the relation, and conveys the vivacity of the impression to the related idea with an easier and more natural movement.

No weakness of human nature is more universal and conspicuous than what we commonly call CREDULITY, or a too easy faith in the testimony of others; and this weakness is also very naturally accounted for from the influence of resemblance. When we receive any matter of fact upon human testimony, our faith arises from the very same origin as our inferences from causes to effects, and from effects to causes; nor is there anything but our *experience* of the governing principles of human nature, which can give us any assurance of the veracity of men. But tho' experience be the true standard of this, as well as of all other judgments, we seldom regulate ourselves entirely by it; but have a remarkable propensity to believe whatever is reported, even concerning apparitions, enchantments, and prodigies, however contrary to daily experience and observation. The words or discourses of others have an intimate connexion with certain ideas in their mind; and these ideas have also a connexion with the facts or objects, which they represent. This latter connexion is generally much over-rated, and commands our assent beyond what experience will justify; which can proceed from nothing beside the resemblance betwixt the ideas and the facts. Other effects only point out their causes in an oblique manner; but the testimony of men does it directly, and is to be consider'd as an image as well as an effect. No wonder, therefore, we are so rash in drawing our inferences from it, and are less guided by experience in our judgments concerning it, than in those upon any other subject.

As resemblance, when conjoin'd with causation, fortifies our reasonings; so the want of it in any very great degree is able almost entirely to destroy them. Of this there is a remarkable instance in the universal carelessness and stupidity of men with regard to a future state, where they show as obstinate an incredulity, as they do a blind credulity on other occasions. There is not indeed a more ample matter

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of wonder to the studious, and of regret to the pious man, than to observe the negligence of the bulk of mankind concerning their approaching condition; and 'tis with reason, that many eminent theologians have not scrupled to affirm, that tho' the vulgar have no formal principles of infidelity, yet they are really infidels in their hearts, and have nothing like what we can call a belief of the eternal duration of their souls. For let us consider on the one hand what divines have display'd with such eloquence concerning the importance of eternity; and at the same time reflect, that tho' in matters of rhetoric we ought to lay our account with some exaggeration, we must in this case allow, that the strongest figures are infinitely inferior to the subject: And after this let us view on the other hand, the prodigious security of men in this particular: I ask, if these people really believe what is inculcated on them, and what they pretend to affirm; and the answer is obviously in the negative. As belief is an act of the mind arising from custom, 'tis not strange the want of resemblance shou'd overthrow what custom has establish'd, and diminish the force of the idea, as much as that latter principle encreases it. A future state is so far remov'd from our comprehension, and we have so obscure an idea of the manner, in which we shall exist after the dissolution of the body, that all the reasons we can invent, however strong in themselves, and however much assisted by education, are never able with slow imaginations to surmount this difficulty, or bestow a sufficient authority and force on the idea. I rather choose to ascribe this incredulity to the faint idea we form of our future condition, deriv'd from its want of resemblance to the present life, than to that deriv'd from its remoteness. For I observe, that men are everywhere concern'd about what may happen after their death, provided it regard this world; and that there are few to whom their name, their family, their friends, and their country are in any period of time entirely indifferent.

And indeed the want of resemblance in this case so entirely destroys belief, that except those few, who upon cool reflection on the importance of the subject, have taken care by repeated meditation to imprint in their minds the arguments for a future state, there scarce are any, who believe the immortality of the soul with a true and establish'd judg-

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ment; such as is deriv'd from the testimony of travellers and historians. This appears very conspicuously wherever men have occasion to compare the pleasures and pains, the rewards and punishments of this life with those of a future; even tho' the case does not concern themselves, and there is no violent passion to disturb their judgment. The *Roman Catholicks* are certainly the most zealous of any sect in the Christian world; and yet you'll find few among the more sensible people of that communion who do not blame the *Gunpowder-treason*, and the massacre of St. *Bartholomew*, as cruel and barbarous, tho' projected or executed against those very people, whom without any scruple they condemn to eternal and infinite punishments. All we can say in excuse for this inconsistency is, that they really do not believe what they affirm concerning a future state; nor is there any better proof of it than the very inconsistency.

We may add to this a remark; that in matters of religion men take a pleasure in being terrify'd, and that no preachers are so popular, as those who excite the most dismal and gloomy passions. In the common affairs of life, where we feel and are penetrated with the solidity of the subject, nothing can be more disagreeable than fear and terror; and 'tis only in dramatic performances and in religious discourses, that they ever give pleasure. In these latter cases the imagination reposes itself indolently on the idea; and the passion, being soften'd by the want of belief in the subject, has no more than the agreeable effect of enlivening the mind, and fixing the attention.

The present hypothesis will receive additional confirmation, if we examine the effects of other kinds of custom, as well as of other relations. To understand this we must consider, that custom, to which I attribute all belief and reasoning, may operate upon the mind in invigorating an idea after two several ways. For supposing that in all past experience we have found two objects to have been always conjoin'd together, 'tis evident, that upon the appearance of one of these objects in an impression, we must from custom make an easy transition to the idea of that object, which usually attends it; and by means of the present impression and easy transition must conceive that idea in a stronger and more lively manner, than we do any loose floating image of the fancy. But let us next suppose, that a mere idea alone, without any of this

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curious and almost artificial preparation, shou'd frequently make its appearance in the mind, this idea must by degrees acquire a facility and force; and both by its firm hold and easy introduction distinguish itself from any new and unusual idea. This is the only particular, in which these two kinds of custom agree; and if it appear, that their effects on the judgment are similar and proportionable, we may certainly conclude, that the foregoing explication of that faculty is satisfactory. But can we doubt of this agreement in their influence on the judgment, when we consider the nature and effects of EDUCATION?

All those opinions and notions of things, to which we have been accustom'd from our infancy, take such deep root, that 'tis impossible for us, by all the powers of reason and experience, to eradicate them; and this habit not only approaches in its influence, but even on many occasions prevails over that which arises from the constant and inseparable union of causes and effects. Here we must not be contented with saying, that the vividness of the idea produces the belief: We must maintain that they are individually the same. The frequent repetition of any idea infixes it in the imagination; but cou'd never possibly of itself produce belief, if that act of the mind was, by the original constitution of our natures, annex'd only to a reasoning and comparison of ideas. Custom may lead us into some false comparison of ideas. This is the utmost effect we can conceive of it. But 'tis certain it cou'd never supply the place of that comparison, nor produce any act of the mind, which naturally belong'd to that principle.

A person, that has lost a leg or an arm by amputation, endeavours for a long time afterwards to serve himself with them. After the death of any one, 'tis a common remark of the whole family, but especially of the servants, that they can scarce believe him to be dead, but still imagine him to be in his chamber or in any other place, where they were accustom'd to find him. I have often heard in conversation, after talking of a person, that is any way celebrated, that one, who has no acquaintance with him, will say, *I have never seen such-a-one, but almost fancy I have; so often have I heard talk of him.* All these are parallel instances.

If we consider this argument from *education* in a proper light, 'twill appear very convincing; and the more so, that 'tis

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founded on one of the most common phænomena, that is any where to be met with. I am persuaded, that upon examination we shall find more than one half of those opinions, that prevail among mankind, to be owing to education, and that the principles, which are thus implicitely embrac'd, overballance those, which are owing either to abstract reasoning or experience. As liars, by the frequent repetition of their lies, come at last to remember them; so the judgment, or rather the imagination, by the like means, may have ideas so strongly imprinted on it, and conceive them in so full a light, that they may operate upon the mind in the same manner with those, which the senses, memory or reason present to us. But as education is an artificial and not a natural cause, and as its maxims are frequently contrary to reason, and even to themselves in different times and places, it is never upon that account recogniz'd by philosophers; tho' in reality it be built almost on the same foundation of custom and repetition as our reasonings from causes and effects.[1]

SECT. X.—*Of the Influence of Belief.*

But tho' education be disclaim'd by philosophy, as a fallacious ground of assent to any opinion, it prevails nevertheless in the world, and is the cause why all systems are apt to be rejected at first as new and unusual. This perhaps will be the fate of what I have here advanc'd concerning *belief*, and tho' the proofs I have produc'd appear to me perfectly conclusive, I expect not to make many proselytes to my opinion. Men will scarce ever be persuaded, that effects of such consequence can flow from principles, which are seemingly so inconsiderable, and that the far greatest part of our reasonings with all our actions and

[1] In general we may observe, that as our assent to all probable reasonings is founded on the vivacity of ideas, it resembles many of those whimsies and prejudices, which are rejected under the opprobrious character of being the offspring of the imagination. By this expression it appears that the word, imagination, is commonly us'd in two different senses; and tho' nothing be more contrary to true philosophy, than this inaccuracy, yet in the following reasonings I have often been oblig'd to fall into it. When I oppose the imagination to the memory, I mean the faculty, by which we form our fainter ideas. When I oppose it to reason, I mean the same faculty, excluding only our demonstrative and probable reasonings. When I oppose it to neither, 'tis indifferent whether it be taken in the larger or more limited sense, or at least the context will sufficiently explain the meaning.

passions, can be deriv'd from nothing but custom and habit. To obviate this objection, I shall here anticipate a little what wou'd more properly fall under our consideration afterwards, when we come to treat of the passions and the sense of beauty.

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There is implanted in the human mind a perception of pain and pleasure, as the chief spring and moving principle of all its actions. But pain and pleasure have two ways of making their appearance in the mind; of which the one has effects very different from the other. They may either appear in impression to the actual feeling, or only in idea, as at present when I mention them. 'Tis evident the influence of these upon our actions is far from being equal. Impressions always actuate the soul, and that in the highest degree; but 'tis not every idea which has the same effect. Nature has proceeded with caution in this case, and seems to have carefully avoided the inconveniences of two extremes. Did impressions alone influence the will, we should every moment of our lives be subject to the greatest calamities; because, tho' we foresaw their approach, we should not be provided by nature with any principle of action, which might impel us to avoid them. On the other hand, did every idea influence our actions, our condition would not be much mended. For such is the unsteadiness and activity of thought, that the images of every thing, especially of goods and evils, are always wandering in the mind; and were it mov'd by every idle conception of this kind, it would never enjoy a moment's peace and tranquillity.

Nature has, therefore, chosen a medium, and has neither bestow'd on every idea of good and evil the power of actuating the will, nor yet has entirely excluded them from this influence. Tho' an idle fiction has no efficacy, yet we find by experience, that the ideas of those objects, which we believe either are or will be existent, produce in a lesser degree the same effect with those impressions, which are immediately present to the senses and perception. The effect, then, of belief is to raise up a simple idea to an equality with our impressions, and bestow on it a like influence on the passions. This effect it can only have by making an idea approach an impression in force and vivacity. For as the different degrees of force make all the original difference betwixt an impression and an idea, they

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must of consequence be the source of all the differences in the effects of these perceptions, and their removal, in whole or in part, the cause of every new resemblance they acquire. Wherever we can make an idea approach the impressions in force and vivacity, it will likewise imitate them in its influence on the mind; and *vice versa*, where it imitates them in that influence, as in the present case, this must proceed from its approaching them in force and vivacity. Belief, therefore, since it causes an idea to imitate the effects of the impressions, must make it resemble them in these qualities, and is nothing but *a more vivid and intense conception of any idea*. This, then, may both serve as an additional argument for the present system, and may give us a notion after what manner our reasonings from causation are able to operate on the will and passions.

As belief is almost absolutely requisite to the exciting our passions, so the passions in their turn are very favourable to belief; and not only such facts as convey agreeable emotions, but very often such as give pain, do upon that account become more readily the objects of faith and opinion. A coward, whose fears are easily awaken'd, readily assents to every account of danger he meets with; as a person of a sorrowful and melancholy disposition is very credulous of every thing, that nourishes his prevailing passion. When any affecting object is presented, it gives the alarm, and excites immediately a degree of its proper passion; especially in persons who are naturally inclined to that passion. This emotion passes by an easy transition to the imagination; and diffusing itself over our idea of the affecting object, makes us form that idea with greater force and vivacity, and consequently assent to it, according to the precedent system. Admiration and surprize have the same effect as the other passions; and accordingly we may observe, that among the vulgar, quacks and projectors meet with a more easy faith upon account of their magnificent pretensions, than if they kept themselves within the bounds of moderation. The first astonishment, which naturally attends their miraculous relations, spreads itself over the whole soul, and so vivifies and enlivens the idea, that it resembles the inferences we draw from experience. This is a mystery, with which we may be already a little acquainted, and which we shall have farther occasion to be let into in the progress of this treatise.

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After this account of the influence of belief on the passions, we shall find less difficulty in explaining its effects on the imagination, however extraordinary they may appear. 'Tis certain we cannot take pleasure in any discourse, where our judgment gives no assent to those images which are presented to our fancy. The conversation of those who have acquir'd a habit of lying, tho' in affairs of no moment, never gives any satisfaction; and that because those ideas they present to us, not being attended with belief, make no impression upon the mind. Poets themselves, tho' liars by profession, always endeavour to give an air of truth to their fictions; and where that is totally neglected, their performances, however ingenious, will never be able to afford much pleasure. In short, we may observe, that even when ideas have no manner of influence on the will and passions, truth and reality are still requisite, in order to make them entertaining to the imagination.

But if we compare together all the phænomena that occur on this head, we shall find, that truth, however necessary it may seem in all works of genius, has no other effect than to procure an easy reception for the ideas, and to make the mind acquiesce in them with satisfaction, or at least without reluctance. But as this is an effect, which may easily be supposed to flow from that solidity and force, which, according to my system, attend those ideas that are establish'd by reasonings from causation; it follows, that all the influence of belief upon the fancy may be explained from that system. Accordingly we may observe, that wherever that influence arises from any other principles beside truth or reality, they supply its place, and give an equal entertainment to the imagination. Poets have form'd what they call a poetical system of things, which tho' it be believ'd neither by themselves nor readers, is commonly esteem'd a sufficient foundation for any fiction. We have been so much accustom'd to the names of MARS, JUPITER, VENUS, that in the same manner as education infixes any opinion, the constant repetition of these ideas makes them enter into the mind with facility, and prevail upon the fancy, without influencing the judgment. In like manner tragedians always borrow their fable, or at least the names of their principal actors, from some known passage in history; and that not in order to deceive the spectators; for they will frankly confess, that truth is not

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in any circumstance inviolably observed; but in order to procure a more easy reception into the imagination for those extraordinary events, which they represent. But this is a precaution, which is not required of comic poets, whose personages and incidents, being of a more familar kind, enter easily into the conception, and are received without any such formality, even tho' at first sight they be known to be fictitious, and the pure offspring of the fancy.

This mixture of truth and falshood in the fables of tragic poets not only serves our present purpose, by shewing, that the imagination can be satisfy'd without any absolute belief or assurance; but may in another view be regarded as a very strong confirmation of this system. 'Tis evident, that poets make use of this artifice of borrowing the names of their persons, and the chief events of their poems, from history, in order to procure a more easy reception for the whole, and cause it to make a deeper impression on the fancy and affections. The several incidents of the piece acquire a kind of relation by being united into one poem or representation; and if any of these incidents be an object of belief, it bestows a force and vivacity on the others, which are related to it. The vividness of the first conception diffuses itself along the relations, and is convey'd, as by so many pipes or canals, to every idea that has any communication with the primary one. This, indeed, can never amount to a perfect assurance; and that because the union among the ideas is, in a manner, accidental: But still it approaches so near, in its influence, as may convince us, that they are deriv'd from the same origin. Belief must please the imagination by means of the force and vivacity which attends it; since every idea, which has force and vivacity, is found to be agreeable to that faculty.

To confirm this we may observe, that the assistance is mutual betwixt the judgment and fancy, as well as betwixt the judgment and passion; and that belief not only gives vigour to the imagination, but that a vigorous and strong imagination is of all talents the most proper to procure belief and authority. 'Tis difficult for us to withhold our assent from what is painted out to us in all the colours of eloquence; and the vivacity produc'd by the fancy is in many cases greater than that which arises from custom and experience. We are hurried away by the lively imagination of our author

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or companion; and even he himself is often a victim to his own fire and genius.

Nor will it be amiss to remark, that as a lively imagination very often degenerates into madness or folly, and bears it a great resemblance in its operations; so they influence the judgment after the same manner, and produce belief from the very same principles. When the imagination, from any extraordinary ferment of the blood and spirits, acquires such a vivacity as disorders all its powers and faculties, there is no means of distinguishing betwixt truth and falshood; but every loose fiction or idea, having the same influence as the impressions of the memory, or the conclusions of the judgment, is receiv'd on the same footing, and operates with equal force on the passions. A present impression and a customary transition are now no longer necessary to inliven our ideas. Every chimera of the brain is as vivid and intense as any of those inferences, which we formerly dignify'd with the name of conclusions concerning matters of fact, and sometimes as the present impressions of the senses.[1]

We may observe the same effect of poetry in a lesser degree; and this is common both to poetry and madness, that the vivacity they bestow on the ideas is not deriv'd from the particular situations or connexions of the objects of these ideas, but from the present temper and disposition of the person. But how great soever the pitch may be, to which this vivacity rises, 'tis evident, that in poetry it never has the same *feeling* with that which arises in the mind, when we reason, tho' even upon the lowest species of probability. The mind can easily distinguish betwixt the one and the other; and whatever emotion the poetical enthusiasm may give to the spirits, 'tis still the mere phantom of belief or persuasion. The case is the same with the idea, as with the passion it occasions. There is no passion of the human mind but what may arise from poetry; tho' at the same time the *feelings* of the passions are very different when excited by poetical fictions, from what they are when they arise from belief and reality. A passion, which is disagreeable in real life, may afford the highest entertainment in a tragedy, or epic poem. In the latter case, it lies not with that weight upon us: It feels less firm and solid: And has no other than the agreeable effect of exciting the spirits, and rouzing the attention. The difference

[1] The three following paragraphs were added in the Appendix.—Ed.

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in the passions is a clear proof of a like difference in those ideas, from which the passions are deriv'd. Where the vivacity arises from a customary conjunction with a present impression; tho' the imagination may not, in appearance, be so much mov'd; yet there is always something more forcible and real in its actions, than in the fervors of poetry and eloquence. The force of our mental actions in this case, no more than in any other, is not to be measur'd by the apparent agitation of the mind. A poetical description may have a more sensible effect on the fancy, than an historical narration. It may collect more of those circumstances, that form a compleat image or picture. It may seem to set the object before us in more lively colours. But still the ideas it presents are different to the *feeling* from those, which arise from the memory and the judgment. There is something weak and imperfect amidst all that seeming vehemence of thought and sentiment, which attends the fictions of poetry.

We shall afterwards have occasion to remark both the resemblances and differences betwixt a poetical enthusiasm, and a serious conviction. In the mean time I cannot forbear observing, that the great difference in their feeling proceeds in some measure from reflection and *general rules*. We observe, that the vigour of conception, which fictions receive from poetry and eloquence, is a circumstance merely accidental, of which every idea is equally susceptible; and that such fictions are connected with nothing that is real. This observation makes us only lend ourselves, so to speak, to the fiction: But causes the idea to feel very different from the eternal establish'd persuasions founded on memory and custom. They are somewhat of the same kind: But the one is much inferior to the other, both in its causes and effects.

A like reflection on *general rules* keeps us from augmenting our belief upon every encrease of the force and vivacity of our ideas. Where an opinion admits of no doubt, or opposite probability, we attribute to it a full conviction; tho' the want of resemblance, or contiguity, may render its force inferior to that of other opinions. 'Tis thus the understanding corrects the appearances of the senses, and makes us imagine, that an object at twenty foot distance seems even to the eye as large as one of the same dimensions at ten.

We may observe the same effect of poetry in a lesser degree; only with this difference, that the least reflection

dissipates the illusions of poetry, and places the objects in their proper light. 'Tis however certain, that in the warmth of a poetical enthusiasm, a poet has a counterfeit belief, and even a kind of vision of his objects: And if there be any shadow of argument to support this belief, nothing contributes more to his full conviction than a blaze of poetical figures and images, which have their effect upon the poet himself, as well as upon his readers.

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SECT. XI.—*Of the Probability of Chances.*

But in order to bestow on this system its full force and evidence, we must carry our eye from it a moment to consider its consequences, and explain from the same principles some other species of reasoning, which are deriv'd from the same origin.

Those philosophers, who have divided human reason into *knowledge and probability*, and have defin'd the first to be *that evidence, which arises from the comparison of ideas*, are oblig'd to comprehend all our arguments from causes or effects under the general term of probability. But tho' every one be free to use his terms in what sense he pleases; and accordingly in the precedent part of this discourse, I have follow'd this method of expression; 'tis however certain, that in common discourse we readily affirm, that many arguments from causation exceed probability, and may be receiv'd as a superior kind of evidence.[1] One wou'd appear ridiculous, who wou'd say, that 'tis only probable the sun will rise to-morrow, or that all men must dye; tho' 'tis plain we have no further assurance of these facts, than what experience affords us. For this reason, 'twould perhaps be more convenient, in order at once to preserve the common signification of words, and mark the several degrees of evidence, to distinguish human reason into three kinds, viz. *that from knowledge, from proofs, and from probabilities*. By knowledge, I mean the assurance arising from the comparison of ideas. By proofs, those arguments, which are deriv'd from the relation of cause and effect, and which are entirely free from doubt and uncertainty. By probability, that evidence, which

[1] [Introd. § 335.]

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is still attended with uncertainty. 'Tis this last species of reasoning, I proceed to examine.

Probability or reasoning from conjecture may be divided into two kinds, *viz.* that which is founded on *chance*, and that which arises from *causes*. We shall consider each of these in order.

The idea of cause and effect is deriv'd from experience, which presenting us with certain objects constantly conjoin'd with each other, produces such a habit of surveying them in that relation, that we cannot without a sensible violence survey them in any other. On the other hand, as chance is nothing real in itself, and, properly speaking, is merely the negation of a cause, its influence on the mind is contrary to that of causation; and 'tis essential to it, to leave the imagination perfectly indifferent, either to consider the existence or non-existence of that object, which is regarded as contingent. A cause traces the way to our thought, and in a manner forces us to survey such certain objects, in such certain relations. Chance can only destroy this determination of the thought, and leave the mind in its native situation of indifference; in which, upon the absence of a cause, 'tis instantly re-instated.

Since therefore an entire indifference is essential to chance, no one chance can possibly be superior to another, otherwise than as it is compos'd of a superior number of equal chances. For if we affirm that one chance can, after any other manner, be superior to another, we must at the same time affirm, that there is something, which gives it the superiority, and determines the event rather to that side than the other: That is, in other words, we must allow of a cause, and destroy the supposition of chance; which we had before establish'd. A perfect and total indifference is essential to chance, and one total indifference can never in itself be either superior or inferior to another. This truth is not peculiar to my system, but is acknowledg'd by every one, that forms calculations concerning chances.

And here 'tis remarkable, that tho' chance and causation be directly contrary, yet 'tis impossible for us to conceive this combination of chances, which is requisite to render one hazard superior to another, without supposing a mixture of causes among the chances, and a conjunction of necessity in some particulars, with a total indifference in others. Where

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nothing limits the chances, every notion, that the most extravagant fancy can form, is upon a footing of equality; nor can there be any circumstance to give one the advantage above another. Thus unless we allow, that there are some causes to make the dice fall, and preserve their form in their fall, and lie upon some one of their sides, we can form no calculation concerning the laws of hazard. But supposing these causes to operate, and supposing likewise all the rest to be indifferent and to be determin'd by chance, 'tis easy to arrive at a notion of a superior combination of chances. A dye that has four sides mark'd with a certain number of spots, and only two with another, affords us an obvious and easy instance of this superiority. The mind is here limited by the causes to such a precise number and quality of the events; and at the same time is undetermin'd in its choice of any particular event.

Proceeding then in that reasoning, wherein we have advanc'd three steps; *that* chance is merely the negation of a cause, and produces a total indifference in the mind; *that* one negation of a cause and one total indifference can never be superior or inferior to another; and *that* there must always be a mixture of causes among the chances, in order to be the foundation of any reasoning: We are next to consider what effect a superior combination of chances can have upon the mind, and after what manner it influences our judgment and opinion. Here we may repeat all the same arguments we employ'd in examining that belief, which arises from causes; and may prove, after the same manner, that a superior number of chances produces our assent neither by *demonstration* nor *probability*. 'Tis indeed evident, that we can never by the comparison of mere ideas make any discovery, which can be of consequence in this affair, and that 'tis impossible to prove with certainty, that any event must fall on that side where there is a superior number of chances. To suppose in this case any certainty, were to overthrow what we have establish'd concerning the opposition of chances, and their perfect equality and indifference.

Shou'd it be said, that tho' in an opposition of chances 'tis impossible to determine with *certainty*, on which side the event will fall, yet we can pronounce with certainty, that 'tis more likely and probable, 'twill be on that side where there is a superior number of chances, than where there is an

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inferior: Shou'd this be said, I wou'd ask, what is here meant by *likelihood and probability?* The likelihood and probability of chances is a superior number of equal chances; and consequently when we say 'tis likely the event will fall on the side, which is superior, rather than on the inferior, we do no more than affirm, that where there is a superior number of chances there is actually a superior, and where there is an inferior there is an inferior; which are identical propositions, and of no consequence. The question is, by what means a superior number of equal chances operates upon the mind, and produces belief or assent; since it appears, that 'tis neither by arguments deriv'd from demonstration, nor from probability.

In order to clear up this difficulty, we shall suppose a person to take a dye, form'd after such a manner as that four of its sides are mark'd with one figure, or one number of spots, and two with another; and to put this dye into the box with an intention of throwing it: 'Tis plain, he must conclude the one figure to be more probable than the other, and give the preference to that which is inscrib'd on the greatest number of sides. He in a manner believes, that this will lie uppermost; tho' still with hesitation and doubt, in proportion to the number of chances, which are contrary: And according as these contrary chances diminish, and the superiority encreases on the other side, his belief acquires new degrees of stability and assurance. This belief arises from an operation of the mind upon the simple and limited object before us; and therefore its nature will be the more easily discover'd and explain'd. We have nothing but one single dye to contemplate, in order to comprehend one of the most curious operations of the understanding.

This dye, form'd as above, contains three circumstances worthy of our attention. *First*, Certain causes, such as gravity, solidity, a cubical figure, *&c.* which determine it to fall, to preserve its form in its fall, and to turn up one of its sides. *Secondly*, A certain number of sides, which are suppos'd indifferent. *Thirdly*, A certain figure inscrib'd on each side. These three particulars form the whole nature of the dye, so far as relates to our present purpose; and consequently are the only circumstances regarded by the mind in its forming a judgment concerning the result of such a throw. Let us, therefore, consider gradually and carefully what must

be the influence of these circumstances on the thought and imagination.

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Of the probability of chances.

First, We have already observ'd, that the mind is determin'd by custom to pass from any cause to its effect, and that upon the appearance of the one, 'tis almost impossible for it not to form an idea of the other. Their constant conjunction in past instances has produc'd such a habit in the mind, that it always conjoins them in its thought, and infers the existence of the one from that of its usual attendant. When it considers the dye as no longer supported by the box, it cannot without violence regard it as suspended in the air; but naturally places it on the table, and views it as turning up one of its sides. This is the effect of the intermingled causes, which are requisite to our forming any calculation concerning chances.

Secondly, 'Tis suppos'd, that tho' the dye be necessarily determin'd to fall, and turn up one of its sides, yet there is nothing to fix the particular side, but that this is determin'd entirely by chance. The very nature and essence of chance is a negation of causes, and the leaving the mind in a perfect indifference among those events, which are suppos'd contingent. When therefore the thought is determin'd by the causes to consider the dye as falling and turning up one of its sides, the chances present all these sides as equal, and make us consider every one of them, one after another, as alike probable and possible. The imagination passes from the cause, *viz.* the throwing of the dye, to the effect, *viz.* the turning up one of the six sides; and feels a kind of impossibility both of stopping short in the way, and of forming any other idea. But as all these six sides are incompatible, and the dye cannot turn up above one at once, this principle directs us not to consider all of them at once as lying uppermost; which we look upon as impossible: Neither does it direct us with its entire force to any particular side; for in that case this side wou'd be consider'd as certain and inevitable; but it directs us to the whole six sides after such a manner as to divide its force equally among them. We conclude in general, that some one of them must result from the throw: We run all of them over in our minds: The determination of the thought is common to all; but no more of its force falls to the share of any one, than what is suitable to its proportion with the rest. 'Tis after this manner the

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original impulse, and consequently the vivacity of thought, arising from the causes, is divided and split in pieces by the intermingled chances.

We have already seen the influence of the two first qualities of the dye, *viz.* the *causes*, and the *number* and *indifference* of the sides, and have learn'd how they give an impulse to the thought, and divide that impulse into as many parts as there are unites in the number of sides. We must now consider the effects of the third particular, *viz.* the *figures* inscrib'd on each side. 'Tis evident that where several sides have the same figure inscrib'd on them, they must concur in their influence on the mind, and must unite upon one image or idea of a figure all those divided impulses, that were dispers'd over the several sides, upon which that figure is inscrib'd. Were the question only what side will be turn'd up, these are all perfectly equal, and no one cou'd ever have any advantage above another. But as the question is concerning the figure, and as the same figure is presented by more than one side; 'tis evident, that the impulses belonging to all these sides must re-unite in that one figure, and become stronger and more forcible by the union. Four sides are suppos'd in the present case to have the same figure inscrib'd on them, and two to have another figure. The impulses of the former are, therefore, superior to those of the latter. But as the events are contrary, and 'tis impossible both these figures can be turn'd up; the impulses likewise become contrary, and the inferior destroys the superior, as far as its strength goes. The vivacity of the idea is always proportionable to the degrees of the impulse or tendency to the transition; and belief is the same with the vivacity of the idea, according to the precedent doctrine.

Sect. XII.—*Of the Probability of Causes.*

What I have said concerning the probability of chances can serve to no other purpose, than to assist us in explaining the probability of causes; since 'tis commonly allow'd by philosophers, that what the vulgar call chance is nothing but a secret and conceal'd cause. That species of probability, therefore, is what we must chiefly examine.

The probabilities of causes are of several kinds; but are all deriv'd from the same origin, *viz. the association of ideas*

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to a present impression. As the habit, which produces the association, arises from the frequent conjunction of objects, it must arrive at its perfection by degrees, and must acquire new force from each instance, that falls under our observation. The first instance has little or no force: The second makes some addition to it: The third becomes still more sensible; and 'tis by these slow steps, that our judgment arrives at a full assurance. But before it attains this pitch of perfection, it passes thro' several inferior degrees, and in all of them is only to be esteem'd a presumption or probability. The gradation, therefore, from probabilities to proofs is in many cases insensible; and the difference betwixt these kinds of evidence is more easily perceiv'd in the remote degrees, than in the near and contiguous.

'Tis worthy of remark on this occasion, that tho' the species of probability here explain'd be the first in order, and naturally takes place before any entire proof can exist, yet no one, who is arriv'd at the age of maturity, can any longer be acquainted with it. 'Tis true, nothing is more common than for people of the most advanc'd knowledge to have attain'd only an imperfect experience of many particular events; which naturally produces only an imperfect habit and transition: But then we must consider, that the mind, having form'd another observation concerning the connexion of causes and effects, gives new force to its reasoning from that observation; and by means of it can build an argument on one single experiment, when duly prepar'd and examin'd. What we have found once to follow from any object, we conclude will for ever follow from it; and if this maxim be not always built upon as certain, 'tis not for want of a sufficient number of experiments, but because we frequently meet with instances to the contrary; which leads us to the second species of probability, where there is a *contrariety* in our experience and observation.[1]

'Twou'd be very happy for men in the conduct of their lives and actions, were the same objects always conjoin'd together, and we had nothing to fear but the mistakes of our own judgment, without having any reason to apprehend the uncertainty of nature. But as 'tis frequently found, that one observation is contrary to another, and that causes and effects follow not in the same order, of which we have

[1] [Introd. § 336.]

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had experience, we are oblig'd to vary our reasoning on account of this uncertainty, and take into consideration the contrariety of events. The first question, that occurs on this head, is concerning the nature and causes of the contrariety.

The vulgar, who take things according to their first appearance, attribute the uncertainty of events to such an uncertainty in the causes, as makes them often fail of their usual influence, tho' they meet with no obstacle nor impediment in their operation. But philosophers observing, that almost in every part of nature there is contain'd a vast variety of springs and principles, which are hid, by reason of their minuteness or remoteness, find that 'tis at least possible the contrariety of events may not proceed from any contingency in the cause, but from the secret operation of contrary causes. This possibility is converted into certainty by farther observation, when they remark, that upon an exact scrutiny, a contrariety of effects always betrays a contrariety of causes, and proceeds from their mutual hindrance and opposition. A peasant can give no better reason for the stopping of any clock or watch than to say, that commonly it does not go right: But an artizan easily perceives, that the same force in the spring or pendulum has always the same influence on the wheels; but fails of its usual effect, perhaps by reason of a grain of dust, which puts a stop to the whole movement. From the observation of several parallel instances, philosophers form a maxim, that the connexion betwixt all causes and effects is equally necessary, and that its seeming uncertainty in some instances proceeds from the secret opposition of contrary causes.

But however philosophers and the vulgar may differ in their explication of the contrariety of events, their inferences from it are always of the same kind, and founded on the same principles. A contrariety of events in the past may give us a kind of hesitating belief for the future after two several ways. *First*, By producing an imperfect habit and transition from the present impression to the related idea. When the conjunction of any two objects is frequent, without being entirely constant, the mind is determin'd to pass from one object to the other; but not with so entire a habit, as when the union is uninterrupted, and all the instances we have ever met with are uniform and of a piece. We

find from common experience, in our actions as well as reasonings, that a constant perseverance in any course of life produces a strong inclination and tendency to continue for the future; tho' there are habits of inferior degrees of force, proportion'd to the inferior degrees of steadiness and uniformity in our conduct.

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There is no doubt but this principle sometimes takes place, and produces those inferences we draw from contrary phænomena; tho' I am perswaded, that upon examination we shall not find it to be the principle, that most commonly influences the mind in this species of reasoning. When we follow only the habitual determination of the mind, we make the transition without any reflection, and interpose not a moment's delay betwixt the view of one object and the belief of that, which is often found to attend it. As the custom depends not upon any deliberation, it operates immediately, without allowing any time for reflection. But this method of proceeding we have but few instances of in our probable reasonings; and even fewer than in those, which are deriv'd from the uninterrupted conjunction of objects. In the former species of reasoning we commonly take knowingly into consideration the contrariety of past events; we compare the different sides of the contrariety, and carefully weigh the experiments, which we have on each side: Whence we may conclude, that our reasonings of this kind arise not *directly* from the habit, but in an *oblique* manner; which we must now endeavour to explain.

'Tis evident, that when an object is attended with contrary effects, we judge of them only by our past experience, and always consider those as possible, which we have observ'd to follow from it. And as past experience regulates our judgment concerning the possibility of these effects, so it does that concerning their probability; and that effect, which has been the most common, we always esteem the most likely. Here then are two things to be consider'd, *viz.* the *reasons* which determine us to make the past a standard for the future, and the *manner* how we extract a single judgment from a contrariety of past events.

First we may observe, that the supposition, *that the future resembles the past*, is not founded on arguments of any kind, but is deriv'd entirely from habit, by which we are determin'd to expect for the future the same train of objects, to

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which we have been accustom'd.[1] This habit or determination to transfer the past to the future is full and perfect; and consequently the first impulse of the imagination in this species of reasoning is endow'd with the same qualities.

But, *secondly*, when in considering past experiments we find them of a contrary nature, this determination, tho' full and perfect in itself, presents us with no steady object, but offers us a number of disagreeing images in a certain order and proportion. The first impulse, therefore, is here broke into pieces, and diffuses itself over all those images, of which each partakes an equal share of that force and vivacity, that is deriv'd from the impulse. Any of these past events may again happen; and we judge, that when they do happen, they will be mix'd in the same proportion as in the past.

If our intention, therefore, be to consider the proportions of contrary events in a great number of instances, the images presented by our past experience must remain in their *first form*, and preserve their first proportions. Suppose, for instance, I have found by long observation, that of twenty ships, which go to sea, only nineteen return. Suppose I see at present twenty ships that leave the port: I transfer my past experience to the future, and represent to myself nineteen of these ships as returning in safety, and one as perishing. Concerning this there can be no difficulty. But as we frequently run over those several ideas of past events, in order to form a judgment concerning one single event, which appears uncertain; this consideration must change the *first form* of our ideas, and draw together the divided images presented by experience; since 'tis to *it* we refer the determination of that particular event, upon which we reason. Many of these images are suppos'd to concur, and a superior number to concur on one side. These agreeing images unite together, and render the idea more strong and lively, not only than a mere fiction of the imagination, but also than any idea, which is supported by a lesser number of experiments. Each new experiment is as a new stroke of the pencil, which bestows an additional vivacity on the colours without either multiplying or enlarging the figure. This operation of the mind has been so fully explain'd in treating of the probability of chance, that I need not here

[1] [Introd. § 322 and ff.]

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endeavour to render it more intelligible. Every past experiment may be consider'd as a kind of chance;[1] it being uncertain to us, whether the object will exist conformable to one experiment or another. And for this reason every thing that has been said on the one subject is applicable to both.

Thus upon the whole, contrary experiments produce an imperfect belief, either by weakening the habit, or by dividing and afterwards joining in different parts, that *perfect* habit, which makes us conclude in general, that instances, of which we have no experience, must necessarily resemble those of which we have.

To justify still farther this account of the second species of probability, where we reason with knowledge and reflection from a contrariety of past experiments, I shall propose the following considerations, without fearing to give offence by that air of subtilty, which attends them. Just reasoning ought still, perhaps, to retain its force, however subtile; in the same manner as matter preserves its solidity in the air, and fire, and animal spirits, as well as in the grosser and more sensible forms.

First, We may observe, that there is no probability so great as not to allow of a contrary possibility; because otherwise 'twou'd cease to be a probability, and wou'd become a certainty. That probability of causes, which is most extensive, and which we at present examine, depends on a contrariety of experiments; and 'tis evident an experiment in the past proves at least a possibility for the future.

Secondly, The component parts of this possibility and probability are of the same nature, and differ in number only, but not in kind. It has been observ'd, that all single chances are entirely equal, and that the only circumstance, which can give any event, that is contingent, a superiority over another, is a superior number of chances. In like manner, as the uncertainty of causes is discover'd by experience, which presents us with a view of contrary events, 'tis plain, that when we transfer the past to the future, the known to the unknown, every past experiment has the same weight, and that 'tis only a superior number of them, which can throw the ballance on any side. The possibility, therefore, which enters into every reasoning of this kind, is compos'd of parts, which are of the same nature both

[1] [Introd. § 323.]

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among themselves, and with those, that compose the opposite probability.

Thirdly, We may establish it as a certain maxim, that in all moral as well as natural phænomena, wherever any cause consists of a number of parts, and the effect encreases or diminishes, according to the variation of that number, the effect, properly speaking, is a compounded one, and arises from the union of the several effects, that proceed from each part of the cause. Thus, because the gravity of a body encreases or diminishes by the encrease or diminution of its parts, we conclude that each part contains this quality and contributes to the gravity of the whole. The absence or presence of a part of the cause is attended with that of a proportionable part of the effect. This connexion or constant conjunction sufficiently proves the one part to be the cause of the other. As the belief which we have of any event, encreases or diminishes according to the number of chances or past experiments, 'tis to be consider'd as a compounded effect, of which each part arises from a proportionable number of chances or experiments.[1]

Let us now join these three observations, and see what conclusion we can draw from them. To every probability there is an opposite possibility. This possibility is compos'd of parts, that are entirely of the same nature with those of the probability; and consequently have the same influence on the mind and understanding. The belief, which attends the probability, is a compounded effect, and is form'd by the concurrence of the several effects, which proceed from each part of the probability. Since therefore each part of the probability contributes to the production of the belief, each part of the possibility must have the same influence on the opposite side; the nature of these parts being entirely the same. The contrary belief, attending the possibility, implies a view of a certain object, as well as the probability does an opposite view. In this particular both these degrees of belief are alike. The only manner then, in which the superior number of similar component parts in the one can exert its influence, and prevail above the inferior in the other, is by producing a stronger and more lively view of its object. Each part presents a particular view; and all these views uniting together produce one general view,

[1] [Introd. § 336 and ff.]

which is fuller and more distinct by the greater number of causes or principles, from which it is deriv'd.

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The component parts of the probability and possibility, being alike in their nature, must produce like effects; and the likeness of their effects consists in this, that each of them presents a view of a particular object. But tho' these parts be alike in their nature, they are very different in their quantity and number; and this difference must appear in the effect as well as the similarity. Now as the view they present is in both cases full and entire, and comprehends the object in all its parts, 'tis impossible that in this particular there can be any difference; nor is there any thing but a superior vivacity in the probability, arising from the concurrence of a superior number of views, which can distinguish these effects.

Here is almost the same argument in a different light. All our reasonings concerning the probability of causes are founded on the transferring of past to future. The transferring of any past experiment to the future is sufficient to give us a view of the object; whether that experiment be single or combin'd with others of the same kind; whether it be entire, or oppos'd by others of a contrary kind. Suppose, then, it acquires both these qualities of combination and opposition, it loses not upon that account its former power of presenting a view of the object, but only concurs with and opposes other experiments, that have a like influence. A question, therefore, may arise concerning the manner both of the concurrence and opposition. As to the *concurrence*, there is only the choice left betwixt these two hypotheses. *First*, That the view of the object, occasion'd by the transference of each past experiment, preserves itself entire, and only multiplies the number of views. Or, *secondly*, That it runs into the other similar and correspondent views, and gives them a superior degree of force and vivacity. But that the first hypothesis is erroneous, is evident from experience, which informs us, that the belief, attending any reasoning, consists in one conclusion, not in a multitude of similar ones, which wou'd only distract the mind, and in many cases wou'd be too numerous to be comprehended distinctly by any finite capacity. It remains, therefore, as the only reasonable opinion, that these similar views run into each other, and unite their forces; so as to produce a

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stronger and clearer view, than what arises from any one alone. This is the manner, in which past experiments concur, when they are transfer'd to any future event. As to the manner of their *opposition*, 'tis evident, that as the contrary views are incompatible with each other, and 'tis impossible the object can at once exist conformable to both of them, their influence becomes mutually destructive, and the mind is determin'd to the superior only with that force, which remains after subtracting the inferior.

I am sensible how abstruse all this reasoning must appear to the generality of readers, who not being accustom'd to such profound reflections on the intellectual faculties of the mind, will be apt to reject as chimerical whatever strikes not in with the common receiv'd notions, and with the easiest and most obvious principles of philosophy. And no doubt there are some pains requir'd to enter into these arguments; tho' perhaps very little are necessary to perceive the imperfection of every vulgar hypothesis on this subject, and the little light, which philosophy can yet afford us in such sublime and such curious speculations. Let men be once fully perswaded of these two principles, *That there is nothing in any object, consider'd in itself, which can afford us a reason for drawing a conclusion beyond it;*[1] and, *That even after the observation of the frequent or constant conjunction of objects, we have no reason to draw any inference concerning any object beyond those of which we have had experience;* I say, let men be once fully convinc'd of these two principles, and this will throw them so loose from all common systems, that they will make no difficulty of receiving any, which may appear the most extraordinary. These principles we have found to be sufficiently convincing, even with regard to our most certain reasonings from causation: But I shall venture to affirm, that with regard to these conjectural or probable reasonings they still acquire a new degree of evidence.

First, 'Tis obvious, that in reasonings of this kind, 'tis not the object presented to us, which, consider'd in itself, affords us any reason to draw a conclusion concerning any other object or event. For as this latter object is suppos'd uncertain, and as the uncertainty is deriv'd from a conceal'd contrariety of causes in the former, were any of the causes plac'd in the known qualities of that object, they wou'd no longer be conceal'd, nor wou'd our conclusion be uncertain.

[1] Introduction, §§ 314.

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But, *secondly*, 'tis equally obvious in this species of reasoning, that if the transference of the past to the future were founded merely on a conclusion of the understanding, it cou'd never occasion any belief or assurance. When we transfer contrary experiments to the future, we can only repeat these contrary experiments with their particular proportions; which cou'd not produce assurance in any single event, upon which we reason, unless the fancy melted together all those images that concur, and extracted from them one single idea or image, which is intense and lively in proportion to the number of experiments from which it is deriv'd, and their superiority above their antagonists. Our past experience presents no determinate object; and as our belief, however faint, fixes itself on a determinate object, 'tis evident that the belief arises not merely from the transference of past to future, but from some operation of the *fancy* conjoin'd with it. This may lead us to conceive the manner, in which that faculty enters into all our reasonings.

I shall conclude this subject with two reflections, which may deserve our attention. The *first* may be explain'd after this manner. When the mind forms a reasoning concerning any matter of fact, which is only probable, it casts its eye backward upon past experience, and transferring it to the future, is presented with so many contrary views of its object, of which those that are of the same kind uniting together, and running into one act of the mind, serve to fortify and inliven it. But suppose that this multitude of views or glimpses of an object proceeds not from experience, but from a voluntary act of the imagination; this effect does not follow, or at least, follows not in the same degree. For tho' custom and education produce belief by such a repetition, as is not deriv'd from experience, yet this requires a long tract of time, along with a very frequent and *undesign'd* repetition. In general we may pronounce, that a person who wou'd[1] *voluntarily* repeat any idea in his mind, tho' supported by one past experience, wou'd be no more inclin'd to believe the existence of its object, than if he had contented himself with one survey of it. Beside the effect of design; each act of the mind, being separate and independent, has a separate influence, and

[1] Page 309, 310.

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joins not its force with that of its fellows. Not being united by any common object, producing them, they have no relation to each other; and consequently make no transition or union of forces. This phænomenon we shall understand better afterwards.

My *second* reflection is founded on those large probabilities, which the mind can judge of, and the minute differences it can observe betwixt them. When the chances or experiments on one side amount to ten thousand, and on the other to ten thousand and one, the judgment gives the preference to the latter, upon account of that superiority; tho' 'tis plainly impossible for the mind to run over every particular view, and distinguish the superior vivacity of the image arising from the superior number, where the difference is so inconsiderable. We have a parallel instance in the affections. 'Tis evident, according to the principles above-mention'd, that when an object produces any passion in us, which varies according to the different quantity of the object; I say, 'tis evident, that the passion, properly speaking, is not a simple emotion, but a compounded one, of a great number of weaker passions, deriv'd from a view of each part of the object. For otherwise 'twere impossible the passion shou'd encrease by the encrease of these parts. Thus a man, who desires a thousand pound, has in reality a thousand or more desires, which uniting together, seem to make only one passion; tho' the composition evidently betrays itself upon every alteration of the object, by the preference he gives to the larger number, if superior only by an unite. Yet nothing can be more certain, than that so small a difference wou'd not be discernible in the passions, nor cou'd render them distinguishable from each other. The difference, therefore, of our conduct in preferring the greater number depends not upon our passions, but upon custom, and *general rules*. We have found in a multitude of instances, that the augmenting the numbers of any sum augments the passion, where the numbers are precise and the difference sensible. The mind can perceive from its immediate feeling, that three guineas produce a greater passion than two; and *this* it transfers to larger numbers, because of the resemblance; and by a general rule assigns to a thousand guineas, a stronger passion than to nine hundred and ninety nine. These general rules we shall explain presently.

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But beside these two species of probability, which are deriv'd from an *imperfect* experience and from *contrary* causes, there is a third arising from ANALOGY, which differs from them in some material circumstances.[1] According to the hypothesis above explain'd all kinds of reasoning from causes or effects are founded on two particulars, *viz.* the constant conjunction of any two objects in all past experience, and the resemblance of a present object to any one of them. The effect of these two particulars is, that the present object invigorates and inlivens the imagination; and the resemblance, along with the constant union, conveys this force and vivacity to the related idea; which we are therefore said to believe, or assent to. If you weaken either the union or resemblance, you weaken the principle of transition, and of consequence that belief, which arises from it. The vivacity of the first impression cannot be fully convey'd to the related idea, either where the conjunction of their objects is not constant, or where the present impression does not perfectly resemble any of those, whose union we are accustom'd to observe. In those probabilities of chance and causes above-explain'd, 'tis the constancy of the union, which is diminish'd; and in the probability deriv'd from analogy, 'tis the resemblance only, which is affected. Without some degree of resemblance, as well as union, 'tis impossible there can be any reasoning: but as this resemblance admits of many different degrees, the reasoning becomes proportionably more or less firm and certain. An experiment loses of its force, when transferr'd to instances, which are not exactly resembling; tho' 'tis evident it may still retain as much as may be the foundation of probability, as long as there is any resemblance remaining.

SECT. XIII.—*Of Unphilosophical Probability.*

All these kinds of probability are receiv'd by philosophers, and allow'd to be reasonable foundations of belief and opinion. But there are others, that are deriv'd from the same principles, tho' they have not had the good fortune to obtain the same sanction. The *first* probability of this kind may be accounted for thus. The diminution of the union, and of the resemblance, as above explained, diminishes the facility

[1] [Introd. § 335.]

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of the transition, and by that means weakens the evidence; and we may farther observe, that the same diminution of the evidence will follow from a diminution of the impression, and from the shading of those colours, under which it appears to the memory or senses. The argument, which we found on any matter of fact we remember, is more or less convincing, according as the fact is recent or remote; and tho' the difference in these degrees of evidence be not receiv'd by philosophy as solid and legitimate; because in that case an argument must have a different force to day, from what it shall have a month hence; yet notwithstanding the opposition of philosophy, 'tis certain, this circumstance has a considerable influence on the understanding, and secretly changes the authority of the same argument, according to the different times, in which it is propos'd to us. A greater force and vivacity in the impression naturally conveys a greater to the related idea; and 'tis on the degrees of force and vivacity, that the belief depends, according to the foregoing system.

There is a *second* difference, which we may frequently observe in our degrees of belief and assurance, and which never fails to take place, tho' disclaim'd by philosophers. An experiment, that is recent and fresh in the memory, affects us more than one that is in some measure obliterated; and has a superior influence on the judgment, as well as on the passions. A lively impression produces more assurance than a faint one; because it has more original force to communicate to the related idea, which thereby acquires a greater force and vivacity. A recent observation has a like effect; because the custom and transition is there more entire, and preserves better the original force in the communication. Thus a drunkard, who has seen his companion die of a debauch, is struck with that instance for some time, and dreads a like accident for himself: But as the memory of it decays away by degrees, his former security returns, and the danger seems less certain and real.

I add, as a *third* instance of this kind, that tho' our reasonings from proofs and from probabilities be considerably different from each other, yet the former species of reasoning often degenerates insensibly into the latter, by nothing but the multitude of connected arguments. 'Tis certain, that when an inference is drawn immediately from an object,

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without any intermediate cause or effect, the conviction is much stronger, and the persuasion more lively, than when the imagination is carry'd thro' a long chain of connected arguments, however infallible the connexion of each link may be esteem'd. 'Tis from the original impression, that the vivacity of all the ideas is deriv'd, by means of the customary transition of the imagination; and 'tis evident this vivacity must gradually decay in proportion to the distance, and must lose somewhat in each transition. Sometimes this distance has a greater influence than even contrary experiments wou'd have; and a man may receive a more lively conviction from a probable reasoning, which is close and immediate, than from a long chain of consequences, tho' just and conclusive in each part. Nay 'tis seldom such reasonings produce any conviction; and one must have a very strong and firm imagination to preserve the evidence to the end, where it passes thro' so many stages.

But here it may not be amiss to remark a very curious phænomenon, which the present subject suggests to us. 'Tis evident there is no point of ancient history, of which we can have any assurance, but by passing thro' many millions of causes and effects, and thro' a chain of arguments of almost an immeasurable length. Before the knowledge of the fact cou'd come to the first historian, it must be convey'd thro' many mouths; and after it is committed to writing, each new copy is a new object, of which the connexion with the foregoing is known only by experience and observation. Perhaps, therefore, it may be concluded from the precedent reasoning, that the evidence of all ancient history must now be lost; or at least, will be lost in time, as the chain of causes encreases, and runs on to a greater length. But as it seems contrary to common sense to think, that if the republic of letters, and the art of printing continue on the same footing as at present, our posterity, even after a thousand ages, can ever doubt if there has been such a man as JULIUS CÆSAR; this may be consider'd as an objection to the present system. If belief consisted only in a certain vivacity, convey'd from an original impression, it wou'd decay by the length of the transition, and must at last be utterly extinguish'd: And *vice versa*, if belief on some occasions be not capable of such an extinction; it must be something different from that vivacity.

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Before I answer this objection I shall observe, that from this topic there has been borrow'd a very celebrated argument against the *Christian Religion*;[1] but with this difference, that the connexion betwixt each link of the chain in human testimony has been there suppos'd not to go beyond probability, and to be liable to a degree of doubt and uncertainty. And indeed it must be confest, that in this manner of considering the subject, (which however is not a true one) there is no history or tradition, but what must in the end lose all its force and evidence. Every new probability diminishes the original conviction; and however great that conviction may be suppos'd, 'tis impossible it can subsist under such re-iterated diminutions. This is true in general; tho' we shall find afterwards,[2] that there is one very memorable exception, which is of vast consequence in the present subject of the understanding.

Mean while to give a solution of the preceding objection upon the supposition, that historical evidence amounts at first to an entire proof; let us consider, that tho' the links are innumerable, that connect any original fact with the present impression, which is the foundation of belief; yet they are all of the same kind, and depend on the fidelity of Printers and Copyists. One edition passes into another, and that into a third, and so on, till we come to that volume we peruse at present. There is no variation in the steps. After we know one, we know all of them; and after we have made one, we can have no scruple as to the rest. This circumstance alone preserves the evidence of history, and will perpetuate the memory of the present age to the latest posterity. If all the long chain of causes and effects, which connect any past event with any volume of history, were compos'd of parts different from each other, and which 'twere necessary for the mind distinctly to conceive, 'tis impossible we shou'd preserve to the end any belief or evidence. But as most of these proofs are perfectly resembling, the mind runs easily along them, jumps from one part to another with facility, and forms but a confus'd and general notion of each link. By this means a long chain of argument, has as little effect in diminishing the original vivacity, as a much shorter

[1] [Theologiæ Christianæ Principia Mathematica. By John Craig, 1699.—D.

[2] Part IV. Sect. 1

wou'd have, if compos'd of parts, which were different from each other, and of which each requir'd a distinct consideration.

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A fourth unphilosophical species of probability is that deriv'd from *general rules*, which we rashly form to ourselves, and which are the source of what we properly call PREJUDICE. An *Irishman* cannot have wit, and a *Frenchman* cannot have solidity; for which reason, tho' the conversation of the former in any instance be visibly very agreeable, and of the latter very judicious, we have entertain'd such a prejudice against them, that they must be dunces or fops in spite of sense and reason. Human nature is very subject to errors of this kind; and perhaps this nation as much as any other.

Shou'd it be demanded why men form general rules, and allow them to influence their judgment, even contrary to present observation and experience, I shou'd reply, that in my opinion it proceeds from those very principles, on which all judgments concerning causes and effects depend. Our judgments concerning cause and effect are deriv'd from habit and experience; and when we have been accustom'd to see one object united to another, our imagination passes from the first to the second, by a natural transition, which precedes reflection, and which cannot be prevented by it. Now 'tis the nature of custom not only to operate with its full force, when objects are presented, that are exactly the same with those to which we have been accustom'd; but also to operate in an inferior degree, when we discover such as are similar; and tho' the habit loses somewhat of its force by every difference, yet 'tis seldom entirely destroy'd, where any considerable circumstances remain the same. A man, who has contracted a custom of eating fruit by the use of pears or peaches, will satisfy himself with melons, where he cannot find his favourite fruit; as one, who has become a drunkard by the use of red wines, will be carried almost with the same violence to white, if presented to him. From this principle I have accounted for that species of probability, deriv'd from analogy, where we transfer our experience in past instances to objects which are resembling, but are not exactly the same with those concerning which we have had experience. In proportion as the resemblance decays, the probability diminishes; but still has some force as long as there remain any traces of the resemblance.

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This observation we may carry farther; and may remark, that tho' custom be the foundation of all our judgments, yet sometimes it has an effect on the imagination in opposition to the judgment, and produces a contrariety in our sentiments concerning the same object. I explain myself. In almost all kinds of causes there is a complication of circumstances, of which some are essential, and others superfluous; some are absolutely requisite to the production of the effect, and others are only conjoin'd by accident. Now we may observe, that when these superfluous circumstances are numerous, and remarkable, and frequently conjoin'd with the essential, they have such an influence on the imagination, that even in the absence of the latter they carry us on to the conception of the usual effect, and give to that conception a force and vivacity, which make it superior to the mere fictions of the fancy. We may correct this propensity by a reflection on the nature of those circumstances; but 'tis still certain, that custom takes the start, and gives a biass to the imagination.

To illustrate this by a familiar instance, let us consider the case of a man, who, being hung out from a high tower in a cage of iron cannot forbear trembling, when he surveys the precipice below him, tho' he knows himself to be perfectly secure from falling, by his experience of the solidity of the iron, which supports him; and tho' the ideas of fall and descent, and harm and death, be deriv'd solely from custom and experience. The same custom goes beyond the instances, from which it is deriv'd, and to which it perfectly corresponds; and influences his ideas of such objects as are in some respect resembling, but fall not precisely under the same rule. The circumstances of depth and descent strike so strongly upon him, that their influence cannot be destroy'd by the contrary circumstances of support and solidity, which ought to give him a perfect security. His imagination runs away with its object, and excites a passion proportion'd to it. That passion returns back upon the imagination and inlivens the idea; which lively idea has a new influence on the passion, and in its turn augments its force and violence; and both his fancy and affections, thus mutually supporting each other, cause the whole to have a very great influence upon him.

But why need we seek for other instances, while the present

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subject of philosophical probabilities offers us so obvious an one, in the opposition betwixt the judgment and imagination arising from these effects of custom? According to my system, all reasonings are nothing but the effects of custom; and custom has no influence, but by inlivening the imagination, and giving us a strong conception of any object.[1] It may, therefore, be concluded, that our judgment and imagination can never be contrary, and that custom cannot operate on the latter faculty after such a manner, as to render it opposite to the former. This difficulty we can remove after no other manner, than by supposing the influence of general rules. We shall afterwards take[2] notice of some general rules, by which we ought to regulate our judgment concerning causes and effects; and these rules are form'd on the nature of our understanding, and on our experience of its operations in the judgments we form concerning objects. By them we learn to distinguish the accidental circumstances from the efficacious causes; and when we find that an effect can be produc'd without the concurrence of any particular circumstance, we conclude that that circumstance makes not a part of the efficacious cause, however frequently con-join'd with it. But as this frequent conjunction necessarily makes it have some effect on the imagination, in spite of the opposite conclusion from general rules, the opposition of these two principles produces a contrariety in our thoughts, and causes us to ascribe the one inference to our judgment, and the other to our imagination. The general rule is attributed to our judgment; as being more extensive and constant. The exception to the imagination; as being more capricious and uncertain.

Thus our general rules are in a manner set in opposition to each other. When an object appears, that resembles any cause in very considerable circumstances, the imagination naturally carries us to a lively conception of the usual effect, tho' the object be different in the most material and most efficacious circumstances from that cause. Here is the first influence of general rules. But when we take a review of this act of the mind, and compare it with the more general and authentic operations of the understanding, we find it to be of an irregular nature, and destructive of all the most

[1] [Introd. § 326.]

[2] Sect. 15.

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establish'd principles of reasonings; which is the cause of our rejecting it. This is a second influence of general rules, and implies the condemnation of the former. Sometimes the one, sometimes the other prevails, according to the disposition and character of the person. The vulgar are commonly guided by the first, and wise men by the second. Mean while the sceptics may here have the pleasure of observing a new and signal contradiction in our reason, and of seeing all philosophy ready to be subverted by a principle of human nature, and again sav'd by a new direction of the very same principle. The following of general rules is a very unphilosophical species of probability; and yet 'tis only by following them that we can correct this, and all other unphilosophical probabilities.

Since we have instances, where general rules operate on the imagination even contrary to the judgment, we need not be surpriz'd to see their effects encrease, when conjoin'd with that latter faculty, and to observe that they bestow on the ideas they present to us a force superior to what attends any other. Every one knows, there is an indirect manner of insinuating praise or blame, which is much less shocking than the open flattery or censure of any person. However he may communicate his sentiments by such secret insinuations, and make them known with equal certainty as by the open discovery of them, 'tis certain that their influence is not equally strong and powerful. One who lashes me with conceal'd strokes of satire, moves not my indignation to such a degree, as if he flatly told me I was a fool and coxcomb; tho' I equally understand his meaning, as if he did. This difference is to be attributed to the influence of general rules.

Whether a person openly abuses me, or slyly intimates his contempt, in neither case do I immediately perceive his sentiment or opinion; and 'tis only by signs, that is, by its effects, I become sensible of it. The only difference, then, betwixt these two cases consists in this, that in the open discovery of his sentiments he makes use of signs, which are general and universal; and in the secret intimation employs such as are more singular and uncommon. The effect of this circumstance is, that the imagination, in running from the present impression to the absent idea, makes the transition with greater facility, and consequently conceives the object with greater force, where the connexion is common

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and universal, than where it is more rare and particular. Accordingly we may observe, that the open declaration of our sentiments is call'd the taking off the mask, as the secret intimation of our opinions is said to be the veiling of them. The difference betwixt an idea produc'd by a general connexion, and that arising from a particular one is here compar'd to the difference betwixt an impression and an idea. This difference in the imagination has a suitable effect on the passions; and this effect is augmented by another circumstance. A secret intimation of anger or contempt shews that we still have some consideration for the person, and avoid the directly abusing him. This makes a conceal'd satire less disagreeable; but still this depends on the same principle. For if an idea were not more feeble, when only intimated, it wou'd never be esteem'd a mark of greater respect to proceed in this method than in the other.

Sometimes scurrility is less displeasing than delicate satire, because it revenges us in a manner for the injury at the very time it is committed, by affording us a just reason to blame and contemn the person, who injures us. But this phænomenon likewise depends upon the same principle. For why do we blame all gross and injurious language, unless it be, because we esteem it contrary to good breeding and humanity? And why is it contrary, unless it be more shocking than any delicate satire? The rules of good breeding condemn whatever is openly disobliging, and gives a sensible pain and confusion to those, with whom we converse. After this is once establish'd, abusive language is universally blam'd, and gives less pain upon account of its coarseness and incivility, which render the person despicable, that employs it. It becomes less disagreeable, merely because originally it is more so; and 'tis more disagreeable, because it affords an inference by general and common rules, that are palpable and undeniable.

To this explication of the different influence of open and conceal'd flattery or satire, I shall add the consideration of another phænomenon, which is analogous to it. There are many particulars in the point of honour both of men and women, whose violations, when open and avow'd, the world never excuses, but which it is more apt to overlook, when the appearances are sav'd, and the transgression is secret

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and conceal'd. Even those, who know with equal certainty, that the fault is committed, pardon it more easily, when the proofs seem in some measure oblique and equivocal, than when they are direct and undeniable. The same idea is presented in both cases, and, properly speaking, is equally assented to by the judgment; and yet its influence is different, because of the different manner, in which it is presented.

Now if we compare these two cases, of the *open* and *conceal'd* violations of the laws of honour, we shall find, that the difference betwixt them consists in this, that in the first case the sign, from which we infer the blameable action, is single, and suffices alone to be the foundation of our reasoning and judgment; whereas in the latter the signs are numerous, and decide little or nothing when alone and unaccompany'd with many minute circumstances, which are almost imperceptible. But 'tis certainly true, that any reasoning is always the more convincing, the more single and united it is to the eye, and the less exercise it gives to the imagination to collect all its parts, and run from them to the correlative idea, which forms the conclusion. The labour of the thought disturbs the regular progress of the sentiments, as we shall observe presently.[1] The idea strikes not on us with such vivacity; and consequently has no such influence on the passion and imagination.

From the same principles we may account for those observations of the CARDINAL DE RETZ, *that there are many things, in which the world wishes to be deceiv'd;* and *that it more easily excuses a person in acting than in talking contrary to the decorum of his profession and character.* A fault in words is commonly more open and distinct than one in actions, which admit of many palliating excuses, and decide not so clearly concerning the intention and views of the actor.

Thus it appears upon the whole, that every kind of opinion or judgment, which amounts not to knowledge, is deriv'd entirely from the force and vivacity of the perception, and that these qualities constitute in the mind, what we call the BELIEF of the existence of any object. This force and this vivacity are most conspicuous in the memory; and therefore our confidence in the veracity of that faculty is the greatest imaginable, and equals in many respects the assurance of a

[1] Part IV. Sect. 1.

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demonstration. The next degree of these qualities is that deriv'd from the relation of cause and effect; and this too is very great, especially when the conjunction is found by experience to be perfectly constant, and when the object, which is present to us, exactly resembles those, of which we have had experience. But below this degree of evidence there are many others, which have an influence on the passions and imagination, proportion'd to that degree of force and vivacity, which they communicate to the ideas. 'Tis by habit we make the transition from cause to effect; and 'tis from some present impression we borrow that vivacity, which we diffuse over the correlative idea. But when we have not observ'd a sufficient number of instances, to produce a strong habit; or when these instances are contrary to each other; or when the resemblance is not exact; or the present impression is faint and obscure; or the experience in some measure obliterated from the memory; or the connexion dependent on a long chain of objects; or the inference deriv'd from general rules, and yet not conformable to them: In all these cases the evidence diminishes by the diminution of the force and intenseness of the idea. This therefore is the nature of the judgment and probability.

What principally gives authority to this system is, beside the undoubted arguments, upon which each part is founded, the agreement of these parts, and the necessity of one to explain another. The belief, which attends our memory, is of the same nature with that, which is deriv'd from our judgments: Nor is there any difference betwixt that judgment, which is deriv'd from a constant and uniform connexion of causes and effects, and that which depends upon an interrupted and uncertain. 'Tis indeed evident, that in all determinations, where the mind decides from contrary experiments, 'tis first divided within itself, and has an inclination to either side in proportion to the number of experiments we have seen and remember. This contest is at last determin'd to the advantage of that side, where we observe a superior number of these experiments; but still with a diminution of force in the evidence correspondent to the number of the opposite experiments. Each possibility, of which the probability is compos'd, operates separately upon the imagination; and 'tis the larger collection of possibilities, which at last prevails, and that with a force propor-

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tionable to its superiority. All these phænomena lead directly to the precedent system; nor will it ever be possible upon any other principles to give a satisfactory and consistent explication of them. Without considering these judgments as the effects of custom on the imagination, we shall lose ourselves in perpetual contradiction and absurdity.

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Having thus explain'd the manner, *in which we reason beyond our immediate impressions, and conclude that such particular causes must have such particular effects;* we must now return upon our footsteps to examine that question, which[1] first occur'd to us, and which we dropt in our way, *viz. What is our idea of necessity, when we say that two objects are necessarily connected together.* Upon this head I repeat what I have often had occasion to observe, that as we have no idea, that is not deriv'd from an impression, we must find some impression, that gives rise to this idea of necessity, if we assert we have really such an idea. In order to this I consider, in what objects necessity is commonly suppos'd to lie; and finding that it is always ascrib'd to causes and effects, I turn my eye to two objects suppos'd to be plac'd in that relation; and examine them in all the situations, of which they are susceptible. I immediately perceive, that they are *contiguous* in time and place, and that the object we call cause *precedes* the other we call effect. In no one instance can I go any farther, nor is it possible for me to discover any third relation betwixt these objects. I therefore enlarge my view to comprehend several instances; where I find like objects always existing in like relations of contiguity and succession. At first sight this seems to serve but little to my purpose. The reflection on several instances only repeats the same objects; and therefore can never give rise to a new idea. But upon farther enquiry I find, that the repetition is not in every particular the same, but produces a new impression, and by that means the idea, which I at present examine. For after a frequent repetition, I find, that upon the appearance of one of the objects, the mind is *determin'd* by custom to consider its usual attendant, and to consider it in a stronger light upon account of its relation to

[1] Sect. 2, page 380.

the first object. 'Tis this impression, then, or *determination*, which affords me the idea of necessity.

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I doubt not but these consequences will at first sight be receiv'd without difficulty, as being evident deductions from principles, which we have already establish'd, and which we have often employ'd in our reasonings. This evidence both in the first principles, and in the deductions, may seduce us unwarily into the conclusion, and make us imagine it contains nothing extraordinary, nor worthy of our curiosity. But tho' such an inadvertence may facilitate the reception of this reasoning, 'twill make it be the more easily forgot; for which reason I think it proper to give warning, that I have just now examin'd one of the most sublime questions in philosophy, *viz. that concerning the power and efficacy of causes;* where all the sciences seem so much interested. Such a warning will naturally rouze up the attention of the reader, and make him desire a more full account of my doctrine, as well as of the arguments, on which it is founded. This request is so reasonable, that I cannot refuse complying with it; especially as I am hopeful that these principles, the more they are examin'd, will acquire the more force and evidence.

There is no question, which on account of its importance, as well as difficulty, has caus'd more disputes both among antient and modern philsophers, than this concerning the efficacy of causes, or that quality which makes them be follow'd by their effects. But before they enter'd upon these disputes, methinks it wou'd not have been improper to have examin'd what idea we have of that efficacy, which is the subject of the controversy. This is what I find principally wanting in their reasonings, and what I shall here endeavour to supply.

I begin with observing that the terms of *efficacy*, *agency*, *power*, *force*, *energy*, *necessity*, *connexion*, and *productive quality*, are all nearly synonimous; and therefore 'tis an absurdity to employ any of them in defining the rest. By this observation we reject at once all the vulgar definitions, which philosophers have given of power and efficacy; and instead of searching for the idea in these definitions, must look for it in the impressions, from which it is originally deriv'd. If it be a compound idea, it must arise from compound impressions. If simple, from simple impressions.

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I believe the most general and most popular explication of this matter, is to say,[1] that finding from experience, that there are several new productions in matter, such as the motions and variations of body, and concluding that there must somewhere be a power capable of producing them, we arrive at last by this reasoning at the idea of power and efficacy. But to be convinc'd that this explication is more popular than philosophical, we need but reflect on two very obvious principles. *First*, That reason alone can never give rise to any original idea, and *secondly*, that reason, as distinguish'd from experience, can never make us conclude, that a cause or productive quality is absolutely requisite to every beginning of existence. Both these considerations have been sufficiently explain'd; and therefore shall not at present be any farther insisted on.

I shall only infer from them, that since reason can never give rise to the idea of efficacy, that idea must be deriv'd from experience, and from some particular instances of this efficacy, which make their passage into the mind by the common channels of sensation or reflection. Ideas always represent their objects or impressions; and *vice versa*, there are some objects necessary to give rise to every idea. If we pretend, therefore, to have any just idea of this efficacy, we must produce some instance, wherein the efficacy is plainly discoverable to the mind, and its operations obvious to our consciousness or sensation. By the refusal of this, we acknowledge, that the idea is impossible and imaginary; since the principle of innate ideas, which alone can save us from this dilemma, has been already refuted, and is now almost universally rejected in the learned world. Our present business, then, must be to find some natural production, where the operation and efficacy of a cause can be clearly conceiv'd and comprehended by the mind, without any danger of obscurity or mistake.

In this research we meet with very little encouragement from that prodigious diversity, which is found in the opinions of those philosophers, who have pretended to explain the secret force and energy of causes.[2] There are some, who

[1] See Mr. *Locke*; chapter of power. [Cf. Introd. par. 149.]

[2] See Father *Malbranche*, Book vi. Part 2, chap. 3, and the illustrations upon it.

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maintain, that bodies operate by their substantial form; others, by their accidents or qualities; several, by their matter and form; some, by their form and accidents; others, by certain virtues and faculties distinct from all this. All these sentiments again are mix'd and vary'd in a thousand different ways; and form a strong presumption, that none of them have any solidity or evidence, and that the supposition of an efficacy in any of the known qualities of matter is entirely without foundation. This presumption must encrease upon us, when we consider, that these principles of substantial forms, and accidents, and faculties, are not in reality any of the known properties of bodies, but are perfectly unintelligible and inexplicable. For 'tis evident philosophers wou'd never have had recourse to such obscure and uncertain principles, had they met with any satisfaction in such as are clear and intelligible; especially in such an affair as this, which must be an object of the simplest understanding, if not of the senses. Upon the whole, we may conclude, that 'tis impossible in any one instance to shew the principle, in which the force and agency of a cause is plac'd; and that the most refin'd and most vulgar understandings are equally at a loss in this particular. If any one think proper to refute this assertion, he need not put himself to the trouble of inventing any long reasonings: but may at once shew us an instance of a cause, where we discover the power or operating principle. This defiance we are oblig'd frequently to make use of, as being almost the only means of proving a negative in philosophy.

The small success, which has been met with in all the attempts to fix this power, has at last oblig'd philosophers to conclude, that the ultimate force and efficacy of nature is perfectly unknown to us, and that 'tis in vain we search for it in all the known qualities of matter. In this opinion they are almost unanimous; and 'tis only in the inference they draw from it, that they discover any difference in their sentiments. For some of them, as the *Cartesians* in particular, having establish'd it as a principle, that we are perfectly acquainted with the essence of matter, have very naturally inferr'd, that it is endow'd with no efficacy, and that 'tis impossible for it of itself to communicate motion, or produce any of those effects, which we ascribe to it. As the essence of matter consists in extension, and as extension implies not

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actual motion, but only mobility; they conclude, that the energy, which produces the motion, cannot lie in the extension.

This conclusion leads them into another, which they regard as perfectly unavoidable. Matter, say they, is in itself entirely unactive, and depriv'd of any power, by which it may produce, or continue, or communicate motion: But since these effects are evident to our senses, and since the power, that produces them, must be plac'd somewhere, it must lie in the DEITY, or that divine being, who contains in his nature all excellency and perfection. 'Tis the deity, therefore, who is the prime mover of the universe, and who not only first created matter, and gave it it's original impulse, but likewise by a continu'd exertion of omnipotence, supports its existence, and successively bestows on it all those motions, and configurations, and qualities, with which it is endow'd.

This opinion is certainly very curious, and well worth our attention; but 'twill appear superfluous to examine it in this place, if we reflect a moment on our present purpose in taking notice of it. We have establish'd it as a principle, that as all ideas are deriv'd from impressions, or some precedent *perceptions*, 'tis impossible we can have any idea of power and efficacy, unless some instances can be produc'd, wherein this power *is perceiv'd* to exert itself. Now, as these instances can never be discover'd in body, the *Cartesians*, proceeding upon their principle of innate ideas, have had recourse to a supreme spirit or deity, whom they consider as the only active being in the universe, and as the immediate cause of every alteration in matter. But the principle of innate ideas being allow'd to be false, it follows, that the supposition of a deity can serve us in no stead, in accounting for that idea of agency, which we search for in vain in all the objects, which are presented to our senses, or which we are internally conscious of in our own minds. For if every idea be deriv'd from an impression, the idea of a deity proceeds from the same origin; and if no impression, either of sensation or reflection, implies any force or efficacy, 'tis equally impossible to discover or even imagine any such active principle in the deity. Since these philosophers, therefore, have concluded, that matter cannot be endow'd with any efficacious principle, because 'tis impossible to discover in it such a principle; the same course of reasoning shou'd determine them to exclude it from the supreme being. Or if they esteem that opinion

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absurd and impious, as it really is, I shall tell them how they may avoid it; and that is, by concluding from the very first, that they have no adequate idea of power or efficacy in any object; since neither in body nor spirit, neither in superior nor inferior natures, are they able to discover one single instance of it.

The same conclusion is unavoidable upon the hypothesis of those, who maintain the efficacy of second causes, and attribute a derivative, but a real power and energy to matter. For as they confess, that this energy lies not in any of the known qualities of matter, the difficulty still remains concerning the origin of its idea. If we have really an idea of power, we may attribute power to an unknown quality: But as 'tis impossible, that that idea can be deriv'd from such a quality, and as there is nothing in known qualities, which can produce it; it follows that we deceive ourselves, when we imagine we are possest of any idea of this kind, after the manner we commonly understand it. All ideas are deriv'd from, and represent impressions. We never have any impression, that contains any power or efficacy. We never therefore have any idea of power.

Some[1] have asserted, that we feel an energy, or power, in our own mind; and that having in this manner acquir'd the idea of power, we transfer that quality to matter, where we are not able immediately to discover it. The motions of our body, and the thoughts and sentiments of our mind, (say they) obey the will; nor do we seek any farther to acquire a just notion of force or power. But to convince us how fallacious this reasoning is, we need only consider, that the will being here consider'd as a cause, has no more a discoverable connexion with its effects, than any material cause has with its proper effect. So far from perceiving the connexion betwixt an act of volition, and a motion of the body; 'tis allow'd that no effect is more inexplicable from the powers and essence of thought and matter. Nor is the empire of the will over our mind more intelligible. The effect is there distinguishable and separable from the cause, and cou'd not be foreseen without the experience of their constant conjunction. We have command over our mind to a certain degree, but beyond *that*, lose all empire over it: And 'tis evidently impossible to fix any precise bounds to our

[1] [This paragraph, with its foot-note, was added in the Appendix.—Ed.]

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authority, where we consult not experience. In short, the actions of the mind are, in this respect, the same with those of matter. We perceive only their constant conjunction; nor can we ever reason beyond it. No internal impression has an apparent energy, more than external objects have.[1] Since, therefore, matter is confess'd by philosophers to operate by an unknown force, we shou'd in vain hope to attain an idea of force by consulting our own minds.[2]

It has been establish'd as a certain principle, that general or abstract ideas are nothing but individual ones taken in a certain light, and that, in reflecting on any object, 'tis as impossible to exclude from our thought all particular degrees of quantity and quality as from the real nature of things. If we be possest, therefore, of any idea of power in general, we must also be able to conceive some particular species of it; and as power cannot subsist alone, but is always regarded as an attribute of some being or existence, we must be able to place this power in some particular being, and conceive that being as endow'd with a real force and energy, by which such a particular effect necessarily results from its operation. We must distinctly and particularly conceive the connexion betwixt the cause and effect, and be able to pronounce, from a simple view of the one, that it must be follow'd or preceded by the other. This is the true manner of conceiving a particular power in a particular body: and a general idea being impossible without an individual; where the latter is impossible, 'tis certain the former can never exist. Now nothing is more evident, than that the human mind cannot form such an idea of two objects, as to conceive any connexion betwixt them, or comprehend distinctly that power or efficacy, by which they are united. Such a connexion wou'd amount to a demonstration, and wou'd imply the absolute impossibility for the one object not to follow, or to be conceiv'd

[1] [Contrast the definition of the human mind, Part IV. § 6. It is 'a system of different perceptions or different existences which are linked together by the relation of cause and effect, and mutually produce, destroy, influence, and modify each other.']

[2] The same imperfection attends our ideas of the Deity; but this can have no effect either on religion or morals. The order of the universe proves an omnipotent mind; that is, a mind whose will is *constantly attended* with the obedience of every creature and being. Nothing more is requisite to give a foundation to all the articles of religion, nor is it necessary we shou'd form a distinct idea of the force and energy of the supreme Being.

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not to follow upon the other: Which kind of connexion has already been rejected in all cases. If any one is of a contrary opinion, and thinks he has attain'd a notion of power in any particular object, I desire he may point out to me that object. But till I meet with such-a-one, which I despair of, I cannot forbear concluding, that since we can never distinctly conceive how any particular power can possibly reside in any particular object, we deceive ourselves in imagining we can form any such general idea.

Thus upon the whole we may infer, that when we talk of any being, whether of a superior or inferior nature, as endow'd with a power or force, proportion'd to any effect; when we speak of a necessary connexion betwixt objects, and suppose, that this connexion depends upon an efficacy or energy, with which any of these objects are endow'd; in all these expressions, *so apply'd*, we have really no distinct meaning, and make use only of common words, without any clear and determinate ideas. But as 'tis more probable, that these expressions do here lose their true meaning by being *wrong apply'd*, than that they never have any meaning; 'twill be proper to bestow another consideration on this subject, to see if possibly we can discover the nature and origin of those ideas, we annex to them.

Suppose two objects to be presented to us, of which the one is the cause and the other the effect; 'tis plain, that from the simple consideration of one, or both these objects we never shall perceive the tie by which they are united, or be able certainly to pronounce, that there is a connexion betwixt them. 'Tis not, therefore, from any one instance, that we arrive at the idea of cause and effect, of a necessary connexion of power, of force, of energy, and of efficacy. Did we never see any but particular conjunctions of objects, entirely different from each other, we shou'd never be able to form any such ideas.

But again; suppose we observe several instances, in which the same objects are always conjoin'd together, we immediately conceive a connexion betwixt them, and begin to draw an inference from one to another. This multiplicity of resembling instances, therefore, constitutes the very essence of power or connexion, and is the source from which the idea of it arises. In order, then, to understand the idea of power, we must consider that multiplicity; nor

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do I ask more to give a solution of that difficulty, which has so long perplex'd us. For thus I reason. The repetition of perfectly similar instances can never *alone* give rise to an original idea, different from what is to be found in any particular instance, as has been observ'd, and as evidently follows from our fundamental principle, *that all ideas are copy'd from impressions.* Since therefore the idea of power is a new original idea, not to be found in any one instance, and which yet arises from the repetition of several instances, it follows, that the repetition *alone* has not that effect, but must either *discover* or *produce* something new, which is the source of that idea. Did the repetition neither discover nor produce anything new, our ideas might be multiply'd by it, but wou'd not be enlarg'd above what they are upon the observation of one single instance. Every enlargement, therefore, (such as the idea of power or connexion) which arises from the multiplicity of similar instances, is copy'd from some effects of the multiplicity, and will be perfectly understood by understanding these effects. Wherever we find anything new to be discover'd or produc'd by the repetition, there we must place the power, and must never look for it in any other object.

But 'tis evident, in the first place, that the repetition of like objects in like relations of succession and contiguity *discovers* nothing new in any one of them; since we can draw no inference from it, nor make it a subject either of our demonstrative or probable reasonings;[1] as has been already prov'd. Nay suppose we cou'd draw an inference, 'twou'd be of no consequence in the present case; since no kind of reasoning can give rise to a new idea, such as this of power is; but wherever we reason, we must antecedently be possest of clear ideas, which may be the objects of our reasoning. The conception always precedes the understanding; and where the one is obscure, the other is uncertain; where the one fails, the other must fail also.

Secondly, 'Tis certain that this repetition of similar objects in similar situations *produces* nothing new either in these objects, or in any external body. For 'twill readily be allow'd, that the several instances we have of the conjunction of resembling causes and effects are in themselves

[1] Sect. 6.

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entirely independent, and that the communication of motion, which I see result at present from the shock of two billiard-balls, is totally distinct from that which I saw result from such an impulse a twelve-month ago. These impulses have no influence on each other. They are entirely divided by time and place; and the one might have existed and communicated motion, tho' the other never had been in being.

There is, then, nothing new either discover'd or produc'd in any objects by their constant conjunction, and by the uninterrupted resemblance of their relations of succession and contiguity. But 'tis from this resemblance, that the ideas of necessity, of power, and of efficacy, are deriv'd. These ideas, therefore, represent not anything, that does or can belong to the objects, which are constantly conjoin'd. This is an argument, which, in every view we can examine it, will be found perfectly unanswerable. Similar instances are still the first source of our idea of power or necessity; at the same time that they have no influence by their similarity either on each other, or on any external object. We must, therefore, turn ourselves to some other quarter to seek the origin of that idea.

Tho' the several resembling instances, which give rise to the idea of power, have no influence on each other, and can never produce any new quality *in the object*, which can be the model of that idea, yet the *observation* of this resemblance produces a new impression *in the mind*, which is its real model. For after we have observ'd the resemblance in a sufficient number of instances, we immediately feel a determination of the mind to pass from one object to its usual attendant, and to conceive it in a stronger light upon account of that relation. This determination is the only effect of the resemblance; and therefore must be the same with power or efficacy, whose idea is deriv'd from the resemblance. The several instances of resembling conjunctions lead us into the notion of power and necessity. These instances are in themselves totally distinct from each other, and have no union but in the mind, which observes them, and collects their ideas. Necessity, then, is the effect of this observation, and is nothing but an internal impression of the mind, or a determination to carry our thoughts from one object to another. Without considering it in this view, we can never arrive at the most distant

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notion of it, or be able to attribute it either to external or internal objects, to spirit or body, to causes or effects.

The necessary connexion betwixt causes and effects is the foundation of our inference from one to the other. The foundation of our inference is the transition arising from the accustom'd union. These are, therefore, the same.[1]

The idea of necessity arises from some impression. There is no impression convey'd by our senses, which can give rise to that idea. It must, therefore, be deriv'd from some internal impression, or impression of reflection. There is no internal impression, which has any relation to the present business, but that propensity, which custom produces, to pass from an object to the idea of its usual attendant. This therefore is the essence of necessity. Upon the whole, necessity is something, that exists in the mind, not in objects; nor is it possible for us ever to form the most distant idea of it, consider'd as a quality in bodies. Either we have no idea of necessity, or necessity is nothing but that determination of the thought to pass from causes to effects, and from effects to causes, according to their experienc'd union.

Thus as the necessity, which makes two times two equal to four, or three angles of a triangle equal to two right ones, lies only in the act of the understanding, by which we consider and compare these ideas; in like manner the necessity or power, which unites causes and effects, lies in the determination of the mind to pass from the one to the other. The efficacy or energy of causes is neither plac'd in the causes themselves, nor in the deity, nor in the concurrence of these two principles; but belongs entirely to the soul, which considers the union of two or more objects in all past instances. 'Tis here that the real power of causes is plac'd along with their connexion and necessity.

I am sensible, that of all the paradoxes, which I have had, or shall hereafter have occasion to advance in the course of this treatise, the present one is the most violent, and that 'tis merely by dint of solid proof and reasoning I can ever hope it will have admission, and overcome the inveterate prejudices of mankind. Before we are reconcil'd to this doctrine, how often must we repeat to ourselves, *that* the simple view of any two objects or actions, however related,

[1] [Introd. § 292.]

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can never give us any idea of power, or of a connexion betwixt them: *that* this idea arises from the repetition of their union: *that* the repetition neither discovers nor causes any thing in the objects, but has an influence only on the mind, by that customary transition it produces: *that* this customary transition is, therefore, the same with the power and necessity; which are consequently qualities of perceptions, not of objects, and are internally felt by the soul, and not perceiv'd externally in bodies?[1] There is commonly an astonishment attending every thing extraordinary; and this astonishment changes immediately into the highest degree of esteem or contempt, according as we approve or disapprove of the subject. I am much afraid, that tho' the foregoing reasoning appears to me the shortest and most decisive imaginable; yet with the generality of readers the biass of the mind will prevail, and give them a prejudice against the present doctrine.

This contrary biass is easily accounted for. 'Tis a common observation, that the mind has a great propensity to spread itself on external objects, and to conjoin with them any internal impressions, which they occasion, and which always make their appearance at the same time that these objects discover themselves to the senses. Thus as certain sounds and smells are always found to attend certain visible objects, we naturally imagine a conjunction, even in place, betwixt the objects and qualities, tho' the qualities be of such a nature as to admit of no such conjunction, and really exist no where. But of this more fully[2] hereafter. Mean while 'tis sufficient to observe, that the same propensity is the reason, why we suppose necessity and power to lie in the objects we consider, not in our mind, that considers them; notwithstanding it is not possible for us to form the most distant idea of that quality, when it is not taken for the determination of the mind, to pass from the idea of an object to that of its usual attendant.

But tho' this be the only reasonable account we can give of necessity, the contrary notion is so riveted in the mind from the principles above-mention'd, that I doubt not but my sentiments will be treated by many as extravagant and ridiculous. What! the efficacy of causes lie in the determination of the mind! As if causes did not operate entirely

[1] [Introd. § 292].

[2] Part IV. Sect. 5.

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independent of the mind, and wou'd not continue their operation, even tho' there was no mind existent to contemplate them, or reason concerning them. Thought may well depend on causes for its operation, but not causes on thought. This is to reverse the order of nature, and make that secondary, which is really primary. To every operation there is a power proportion'd; and this power must be plac'd on the body, that operates. If we remove the power from one cause, we must ascribe it to another: But to remove it from all causes, and bestow it on a being, that is no ways related to the cause or effect, but by perceiving them, is a gross absurdity, and contrary to the most certain principles of human reason.

I can only reply to all these arguments, that the case is here much the same, as if a blind man shou'd pretend to find a great many absurdities in the supposition, that the colour of scarlet is not the same with the sound of a trumpet, nor light the same with solidity. If we have really no idea of a power or efficacy in any object, or of any real connexion betwixt causes and effects, 'twill be to little purpose to prove, that an efficacy is necessary in all operations. We do not understand our own meaning in talking so, but ignorantly confound ideas, which are entirely distinct from each other. I am, indeed, ready to allow, that there may be several qualities both in material and immaterial objects, with which we are utterly unacquainted; and if we please to call these *power* or *efficacy*, 'twill be of little consequence to the world. But when, instead of meaning these unknown qualities, we make the terms of power and efficacy signify something, of which we have a clear idea, and which is incompatible with those objects, to which we apply it, obscurity and error begin then to take place, and we are led astray by a false philosophy. This is the case, when we transfer the determination of the thought to external objects, and suppose any real intelligible connexion betwixt them; that being a quality, which can only belong to the mind that considers them.

As to what may be said, that the operations of nature are independent of our thought and reasoning, I allow it; and accordingly have observ'd, that objects bear to each other the relations of contiguity and succession; that like objects may be observ'd in several instances to have like relations; and that all this is independent of, and antecedent to the opera-

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tions of the understanding. But if we go any farther, and ascribe a power or necessary connexion to these objects; this is what we can never observe in them, but must draw the idea of it from what we feel internally in contemplating them. And this I carry so far, that I am ready to convert my present reasoning into an instance of it, by a subtility, which it will not be difficult to comprehend.

When any object is presented to us, it immediately conveys to the mind a lively idea of that object, which is usually found to attend it; and this determination of the mind forms the necessary connexion of these objects. But when we change the point of view, from the objects to the perceptions; in that case the impression is to be considered as the cause, and the lively idea as the effect; and their necessary connexion is that new determination, which we feel to pass from the idea of the one to that of the other. The uniting principle among our internal perceptions is as unintelligible as that among external objects, and is not known to us any other way than by experience. Now the nature and effects of experience have been already sufficiently examin'd and explain'd. It never gives us any insight into the internal structure or operating principle of objects, but only accustoms the mind to pass from one to another.

'Tis now time to collect all the different parts of this reasoning, and by joining them together form an exact definition of the relation of cause and effect, which makes the subject of the present enquiry. This order wou'd not have been excusable, of first examining our inference from the relation before we had explain'd the relation itself, had it been possible to proceed in a different method.[1] But as the nature of the relation depends so much on that of the inference, we have been oblig'd to advance in this seemingly preposterous manner, and make use of terms before we were able exactly to define them, or fix their meaning. We shall now correct this fault by giving a precise definition of cause and effect.

There may two definitions be given of this relation, which are only different, by their presenting a different view of the same object, and making us consider it either as a *philosophical* or as a *natural* relation; either as a comparison of two ideas, or as an association betwixt them. We may define a CAUSE to be 'An object precedent and contiguous to

[1] [See above, Part III. § 2, towards the end.]

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another, and where all the objects resembling the former are plac'd in like relations of precedency and contiguity to those objects that resemble the latter.'[1] If this definition be esteem'd defective, because drawn from objects foreign to the cause, we may substitute this other definition in its place, *viz.* 'A CAUSE is an object precedent and contiguous to another, and so united with it, that the idea of the one determines the mind to form the idea of the other, and the impression of the one to form a more lively idea of the other.'[2] Shou'd this definition also be rejected for the same reason, I know no other remedy, than that the persons, who express this delicacy, shou'd substitute a juster definition in its place. But for my part I must own my incapacity for such an undertaking. When I examine with the utmost accuracy those objects, which are commonly denominated causes and effects, I find, in considering a single instance, that the one object is precedent and contiguous to the other; and in inlarging my view to consider several instances, I find only, that like objects are constantly plac'd in like relations of succession and contiguity. Again, when I consider the influence of this constant conjunction, I perceive, that such a relation can never be an object of reasoning, and can never operate upon the mind, but by means of custom, which determines the imagination to make a transition from the idea of one object to that of its usual attendant, and from the impression of one to a more lively idea of the other. However extraordinary these sentiments may appear, I think it fruitless to trouble myself with any farther enquiry or reasoning upon the subject, but shall repose myself on them as on establish'd maxims.

'Twill only be proper, before we leave this subject, to draw some corrollaries from it, by which we may remove several prejudices and popular errors, that have very much prevail'd in philosophy. First, We may learn from the foregoing doctrine, that all causes are of the same kind, and that in particular there is no foundation for that distinction, which we sometimes make betwixt efficient causes and causes *sine qua non*; or betwixt efficient causes, and formal, and material, and exemplary, and final causes. For as our idea of efficiency is deriv'd from the constant conjunction of two objects, wherever this is observ'd, the cause is efficient;

[1] [Introd. § 296 *et seq.*]

[2] [Introd. § 316 *et seq.*]

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and where it is not, there can never be a cause of any kind. For the same reason we must reject the distinction betwixt *cause* and *occasion*, when suppos'd to signify any thing essentially different from each other. If constant conjunction be imply'd in what we call occasion, 'tis a real cause. If not, 'tis no relation at all, and cannot give rise to any argument or reasoning.

Secondly, The same course of reasoning will make us conclude, that there is but one kind of *necessity*, as there is but one kind of cause, and that the common distinction betwixt *moral* and *physical* necessity is without any foundation in nature. This clearly appears from the precedent explication of necessity. 'Tis the constant conjunction of objects, along with the determination of the mind, which constitutes a physical necessity: And the removal of these is the same thing with *chance*. As objects must either be conjoin'd or not, and as the mind must either be determin'd or not to pass from one object to another, 'tis impossible to admit of any medium betwixt chance and an absolute necessity. In weakening this conjunction and determination you do not change the nature of the necessity; since even in the operation of bodies, these have different degrees of constancy and force, without producing a different species of that relation.

The distinction, which we often make betwixt *power* and the *exercise* of it, is equally without foundation.

Thirdly, We may now be able fully to overcome all that repugnance, which 'tis so natural for us to entertain against the foregoing reasoning, by which we endeavour'd to prove, that the necessity of a cause to every beginning of existence is not founded on any arguments either demonstrative or intuitive. Such an opinion will not appear strange after the foregoing definitions. If we define a cause to be *an object precedent and contiguous to another, and where all the objects resembling the former are plac'd in a like relation of priority and contiguity to those objects, that resemble the latter*; we may easily conceive, that there is no absolute nor metaphysical necessity, that every beginning of existence shou'd be attended with such an object. If we define a cause to be, *An object precedent and contiguous to another, and so united with it in the imagination, that the idea of the one determines the mind to form the idea of the other, and the im-*

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pression of the one to form a more lively idea of the other; we shall make still less difficulty of assenting to this opinion. Such an influence on the mind is in itself perfectly extraordinary and incomprehensible; nor can we be certain of its reality, but from experience and observation.

I shall add as a fourth corrollary that we can never have reason to believe that any object exists, of which we cannot form an idea. For as all our reasonings concerning existence are deriv'd from causation, and as all our reasonings concerning causation are deriv'd from the experienc'd conjunction of objects, not from any reasoning or reflection, the same experience must give us a notion of these objects, and must remove all mystery from our conclusions. This is so evident, that 'twou'd scarce have merited our attention, were it not to obviate certain objections of this kind, which might arise against the following reasonings concerning *matter* and *substance.* I need not observe, that a full knowledge of the object is not requisite, but only of those qualities of it, which we believe to exist.

Sect. XV.—*Rules by which to judge of Causes and Effects.*

According to the precedent doctrine, there are no objects, which by the mere survey, without consulting experience, we can determine to be the causes of any other; and no objects, which we can certainly determine in the same manner not to be the causes. Any thing may produce any thing. Creation, annihilation, motion, reason, volition; all these may arise from one another, or from any other object we can imagine. Nor will this appear strange, if we compare two principles explain'd above, *that the constant conjunction of objects determines their causation,* and [1] *that, properly speaking, no objects are contrary to each other but existence and non-existence.* Where objects are not contrary, nothing hinders them from having that constant conjunction, on which the relation of cause and effect totally depends.

Since therefore 'tis possible for all objects to become causes or effects to each other, it may be proper to fix some general rules, by which we may know when they really are so.[2]

1. The cause and effect must be contiguous in space and time.

[1] Part I. Sect. 5. [2] [Introd. § 316.]

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2. The cause must be prior to the effect.

3. There must be a constant union betwixt the cause and effect. 'Tis chiefly this quality, that constitutes the relation.

4. The same cause always produces the same effect, and the same effect never arises but from the same cause. This principle we derive from experience, and is the source of most of our philosophical reasonings. For when by any clear experiment we have discover'd the causes or effects of any phænomenon, we immediately extend our observation to every phænomenon of the same kind, without waiting for that constant repetition, from which the first idea of this relation is deriv'd.

5. There is another principle, which hangs upon this, *viz.* that where several different objects produce the same effect, it must be by means of some quality, which we discover to be common amongst them. For as like effects imply like causes, we must always ascribe the causation to the circumstance, wherein we discover the resemblance.

6. The following principle is founded on the same reason. The difference in the effects of two resembling objects must proceed from that particular, in which they differ. For as like causes always produce like effects, when in any instance we find our expectation to be disappointed, we must conclude that this irregularity proceeds from some difference in the causes.

7. When any object encreases or diminishes with the encrease or diminution of its cause, 'tis to be regarded as a compounded effect, deriv'd from the union of the several different effects, which arise from the several different parts of the cause. The absence or presence of one part of the cause is here suppos'd to be always attended with the absence or presence of a proportionable part of the effect. This constant conjunction sufficiently proves, that the one part is the cause of the other. We must, however, beware not to draw such a conclusion from a few experiments. A certain degree of heat gives pleasure; if you diminish that heat, the pleasure diminishes; but it does not follow, that if you augment it beyond a certain degree, the pleasure will likewise augment; for we find that it degenerates into pain.

8. The eighth and last rule I shall take notice of is, that an object, which exists for any time in its full perfection without any effect, is not the sole cause of that effect, but

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requires to be assisted by some other principle, which may forward its influence and operation. For as like effects necessarily follow from like causes, and in a contiguous time and place, their separation for a moment shews, that these causes are not compleat ones.

Here is all the LOGIC I think proper to employ in my reasoning; and perhaps even this was not very necessary, but might have been supply'd by the natural principles of our understanding. Our scholastic headpieces and logicians shew no such superiority above the mere vulgar in their reason and ability, as to give us any inclination to imitate them in delivering a long system of rules and precepts to direct our judgment, in philosophy. All the rules of this nature are very easy in their invention, but extremely difficult in their application; and even experimental philosophy, which seems the most natural and simple of any, requires the utmost stretch of human judgment. There is no phænomenon in nature, but what is compounded and modify'd by so many different circumstances, that in order to arrive at the decisive point, we must carefully separate whatever is superfluous, and enquire by new experiments, if every particular circumstance of the first experiment was essential to it. These new experiments are liable to a discussion of the same kind; so that the utmost constancy is requir'd to make us persevere in our enquiry, and the utmost sagacity to choose the right way among so many that present themselves. If this be the case even in natural philosophy, how much more in moral, where there is a much greater complication of circumstances, and where those views and sentiments, which are essential to any action of the mind, are so implicit and obscure, that they often escape our strictest attention, and are not only unaccountable in their causes, but even unknown in their existence? I am much afraid, lest the small success I meet with in my enquiries will make this observation bear the air of an apology rather than of boasting.

If any thing can give me security in this particular, 'twill be the enlarging the sphere of my experiments as much as possible; for which reason it may be proper in this place to examine the reasoning faculty of brutes, as well as that of human creatures.

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Of the reason of animals.

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Next to the ridicule of denying an evident truth, is that of taking much pains to defend it; and no truth appears to me more evident, than that beasts are endow'd with thought and reason, as well as men. The arguments are in this case so obvious, that they never escape the most stupid and ignorant.

We are conscious, that we ourselves, in adapting means to ends, are guided by reason and design, and that 'tis not ignorantly nor casually we perform those actions, which tend to self-preservation, to the obtaining pleasure, and avoiding pain. When therefore we see other creatures, in millions of instances, perform like actions, and direct them to like ends, all our principles of reason and probability carry us with an invincible force to believe the existence of a like cause. 'Tis needless in my opinion to illustrate this argument by the enumeration of particulars. The smallest attention will supply us with more than are requisite. The resemblance betwixt the actions of animals and those of men is so entire in this respect, that the very first action of the first animal we shall please to pitch on, will afford us an incontestable argument for the present doctrine.

This doctrine is as useful as it is obvious, and furnishes us with a kind of touchstone, by which we may try every system in this species of philosophy. 'Tis from the resemblance of the external actions of animals to those we ourselves perform, that we judge their internal likewise to resemble ours; and the same principle of reasoning, carry'd one step farther, will make us conclude that since our internal actions resemble each other, the causes, from which they are deriv'd, must also be resembling. When any hypothesis, therefore, is advanc'd to explain a mental operation, which is common to men and beasts, we must apply the same hypothesis to both; and as every true hypothesis will abide this trial, so I may venture to affirm, that no false one will ever be able to endure it. The common defect of those systems, which philosophers have employ'd to account for the actions of the mind, is, that they suppose such a subtility and refinement of thought, as not only exceeds the capacity of mere animals, but even of children and the common people in our own

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species; who are notwithstanding susceptible of the same emotions and affections as persons of the most accomplish'd genius and understanding. Such a subtility is a clear proof of the falshood, as the contrary simplicity of the truth, of any system.

Let us therefore put our present system concerning the nature of the understanding to this decisive trial, and see whether it will equally account for the reasonings of beasts as for these of the human species.

Here we must make a distinction betwixt those actions of animals, which are of a vulgar nature, and seem to be on a level with their common capacities, and those more extraordinary instances of sagacity, which they sometimes discover for their own preservation, and the propagation of their species. A dog, that avoids fire and precipices, that shuns strangers, and caresses his master, affords us an instance of the first kind. A bird, that chooses with such care and nicety the place and materials of her nest, and sits upon her eggs for a due time, and in a suitable season, with all the precaution, that a chymist is capable of in the most delicate projection, furnishes us with a lively instance of the second.

As to the former actions, I assert they proceed from a reasoning, that is not in itself different, nor founded on different principles, from that which appears in human nature. 'Tis necessary in the first place, that there be some impression immediately present to their memory or senses, in order to be the foundation of their judgment. From the tone of voice the dog infers his master's anger, and foresees his own punishment. From a certain sensation affecting his smell, he judges his game not to be far distant from him.

Secondly, The inference he draws from the present impression is built on experience, and on his observation of the conjunction of objects in past instances. As you vary this experience, he varies his reasoning. Make a beating follow upon one sign or motion for some time, and afterwards upon another; and he will successively draw different conclusions, according to his most recent experience.

Now let any philosopher make a trial, and endeavour to explain that act of the mind, which we call *belief*, and give an account of the principles, from which it is deriv'd, independent of the influence of custom on the imagination, and let his hypothesis be equally applicable to beasts as to the human

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species; and after he has done this, I promise to embrace his opinion. But at the same time I demand as an equitable condition, that if my system be the only one, which can answer to all these terms, it may be receiv'd as entirely satisfactory and convincing. And that 'tis the only one, is evident almost without any reasoning. Beasts certainly never perceive any real connexion among objects. 'Tis therefore by experience they infer one from another. They can never by any arguments form a general conclusion, that those objects, of which they have had no experience, resemble those of which they have. 'Tis therefore by means of custom alone, that experience operates upon them. All this was sufficiently evident with respect to man. But with respect to beasts there cannot be the least suspicion of mistake; which must be own'd to be a strong confirmation, or rather an invincible proof of my system.

Nothing shews more the force of habit in reconciling us to any phænomenon, than this, that men are not astonish'd at the operations of their own reason, at the same time, that they admire the *instinct* of animals, and find a difficulty in explaining it, merely because it cannot be reduc'd to the very same principles. To consider the matter aright, reason is nothing but a wonderful and unintelligible instinct in our souls,[1] which carries us along a certain train of ideas, and endows them with particular qualities, according to their particular situations and relations. This instinct, 'tis true, arises from past observation and experience; but can any one give the ultimate reason, why past experience and observation produces such an effect, any more than why nature alone shou'd produce it? Nature may certainly produce whatever can arise from habit: Nay, habit is nothing but one of the principles of nature, and derives all its force from that origin.

[1] [Introd. § 293.]

PART IV.

OF THE SCEPTICAL AND OTHER SYSTEMS OF PHILOSOPHY.

SECT. I.—*Of Scepticism with regard to Reason.*

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IN all demonstrative sciences the rules are certain and infallible; but when we apply them, our fallible and uncertain faculties are very apt to depart from them, and fall into error. We must, therefore, in every reasoning form a new judgment, as a check or controul on our first judgment or belief; and must enlarge our view to comprehend a kind of history of all the instances, wherein our understanding has deceiv'd us, compar'd with those, wherein its testimony was just and true. Our reason must be consider'd as a kind of cause, of which truth is the natural effect; but such-a-one as by the irruption of other causes, and by the inconstancy of our mental powers, may frequently be prevented. By this means all knowledge degenerates into probability; and this probability is greater or less, according to our experience of the veracity or deceitfulness of our understanding, and according to the simplicity or intricacy of the question.

There is no Algebraist nor Mathematician so expert in his science, as to place entire confidence in any truth immediately upon his discovery of it, or regard it as any thing, but a mere probability. Every time he runs over his proofs, his confidence encreases; but still more by the approbation of his friends; and is rais'd to its utmost perfection by the universal assent and applauses of the learned world. Now 'tis evident, that this gradual encrease of assurance is nothing but the addition of new probabilities, and is deriv'd from the constant union of causes and effects, according to past experience and observation.

In accompts of any length or importance, Merchants seldom trust to the infallible certainty of numbers for their security; but by the artificial structure of the accompts,

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produce a probability beyond what is deriv'd from the skill and experience of the accomptant. For that is plainly of itself some degree of probability; tho' uncertain and variable, according to the degrees of his experience and length of the accompt. Now as none will maintain, that our assurance in a long numeration exceeds probability, I may safely affirm, that there scarce is any proposition concerning numbers, of which we can have a fuller security. For 'tis easily possible, by gradually diminishing the numbers, to reduce the longest series of addition to the most simple question, which can be form'd, to an addition of two single numbers; and upon this supposition we shall find it impracticable to shew the precise limits of knowledge and of probability, or discover that particular number, at which the one ends and the other begins. But knowledge and probability are of such contrary and disagreeing natures, that they cannot well run insensibly into each other, and that because they will not divide, but must be either entirely present, or entirely absent. Besides, if any single addition were certain, every one wou'd be so, and consequently the whole or total sum; unless the whole can be different from all its parts. I had almost said, that this was certain; but I reflect that it must reduce *itself*, as well as every other reasoning, and from knowledge degenerate into probability.

Since therefore all knowledge resolves itself into probability, and becomes at last of the same nature with that evidence, which we employ in common life, we must now examine this latter species of reasoning, and see on what foundation it stands.

In every judgment, which we can form concerning probability, as well as concerning knowledge, we ought always to correct the first judgment, deriv'd from the nature of the object, by another judgment, deriv'd from the nature of the understanding. 'Tis certain a man of solid sense and long experience ought to have, and usually has, a greater assurance in his opinions, than one that is foolish and ignorant, and that our sentiments have different degrees of authority, even with ourselves, in proportion to the degrees of our reason and experience. In the man of the best sense and longest experience, this authority is never entire; since even such-a-one must be conscious of many errors in the past, and must still dread the like for the future. Here then arises a new species of probability to correct and regulate the first,

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and fix its just standard and proportion. As demonstration is subject to the controul of probability, so is probability liable to a new correction by a reflex act of the mind, wherein the nature of our understanding, and our reasoning from the first probability become our objects.

Having thus found in every probability, beside the original uncertainty inherent in the subject, a new uncertainty deriv'd from the weakness of that faculty, which judges, and having adjusted these two together, we are oblig'd by our reason to add a new doubt deriv'd from the possibility of error in the estimation we make of the truth and fidelity of our faculties. This is a doubt, which immediately occurs to us, and of which, if we wou'd closely pursue our reason, we cannot avoid giving a decision. But this decision, tho' it shou'd be favourable to our preceding judgment, being founded only on probability, must weaken still further our first evidence, and must itself be weaken'd by a fourth doubt of the same kind, and so on *in infinitum*; till at last there remain nothing of the original probability, however great we may suppose it to have been, and however small the diminution by every new uncertainty. No finite object can subsist under a decrease repeated *in infinitum*; and even the vastest quantity, which can enter into human imagination, must in this manner be reduc'd to nothing. Let our first belief be never so strong, it must infallibly perish by passing thro' so many new examinations, of which each diminishes somewhat of its force and vigour. When I reflect on the natural fallibility of my judgment, I have less confidence in my opinions, than when I only consider the objects concerning which I reason; and when I proceed still farther, to turn the scrutiny against every successive estimation I make of my faculties, all the rules of logic require a continual diminution, and at last a total extinction of belief and evidence.

Shou'd it here be ask'd me, whether I sincerely assent to this argument, which I seem to take such pains to inculcate, and whether I be really one of those sceptics, who hold that all is uncertain, and that our judgment is not in *any* thing possest of *any* measures of truth and falshood; I shou'd reply, that this question is entirely superfluous, and that neither I, nor any other person was ever sincerely and constantly of that opinion. Nature, by an absolute and uncontroulable necessity has determin'd us to judge as well as to

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breathe and feel; nor can we any more forbear viewing certain objects in a stronger and fuller light, upon account of their customary connexion with a present impression, than we can hinder ourselves from thinking as long as we are awake, or seeing the surrounding bodies, when we turn our eyes towards them in broad sunshine. Whoever has taken the pains to refute the cavils of this *total* scepticism, has really disputed without an antagonist, and endeavour'd by arguments to establish a faculty, which nature has antecedently implanted in the mind, and render'd unavoidable.

My intention then in displaying so carefully the arguments of that fantastic sect, is only to make the reader sensible of the truth of my hypothesis, *that all our reasonings concerning causes and effects are deriv'd from nothing but custom; and that belief is more properly an act of the sensitive, than of the cogitative part of our natures.* I have here prov'd, that the very same principles, which make us form a decision upon any subject, and correct that decision by the consideration of our genius and capacity, and of the situation of our mind, when we examin'd that subject; I say, I have prov'd, that these same principles, when carry'd farther, and apply'd to every new reflex judgment, must, by continually diminishing the original evidence, at last reduce it to nothing, and utterly subvert all belief and opinion. If belief, therefore, were a simple act of the thought, without any peculiar manner of conception, or the addition of a force and vivacity, it must infallibly destroy itself, and in every case terminate in a total suspense of judgment. But as experience will sufficiently convince any one, who thinks it worth while to try, that tho' he can find no error in the foregoing arguments, yet he still continues to believe, and think, and reason as usual, he may safely conclude, that his reasoning and belief is some sensation or peculiar manner of conception, which 'tis impossible for mere ideas and reflections to destroy.

But here, perhaps, it may be demanded, how it happens, even upon my hypothesis, that these arguments above-explain'd produce not a total suspense of judgment, and after what manner the mind ever retains a degree of assurance in any subject? For as these new probabilities, which by their repetition perpetually diminish the original evidence, are founded on the very same principles, whether of thought or sensation, as the primary judgment, it may seem unavoidable,

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that in either case they must equally subvert it, and by the opposition, either of contrary thoughts or sensations, reduce the mind to a total uncertainty. I suppose, there is some question propos'd to me, and that after revolving over the impressions of my memory and senses, and carrying my thoughts from them to such objects, as are commonly conjoin'd with them, I feel a stronger and more forcible conception on the one side, than on the other. This strong conception forms my first decision. I suppose, that afterwards I examine my judgment itself, and observing from experience, that 'tis sometimes just and sometimes erroneous, I consider it as regulated by contrary principles or causes, of which some lead to truth, and some to error; and in ballancing these contrary causes, I diminish by a new probability the assurance of my first decision. This new probability is liable to the same diminution as the foregoing, and so on, *in infinitum*. 'Tis therefore demanded, *how it happens, that even after all we retain a degree of belief, which is sufficient for our purpose, either in philosophy or common life.*

I answer, that after the first and second decision; as the action of the mind becomes forc'd and unnatural, and the ideas faint and obscure; tho' the principles of judgment, and the ballancing of opposite causes be the same as at the very beginning; yet their influence on the imagination, and the vigour they add to, or diminish from the thought, is by no means equal. Where the mind reaches not its objects with easiness and facility, the same principles have not the same effect as in a more natural conception of the ideas; nor does the imagination feel a sensation, which holds any proportion with that which arises from its common judgments and opinions. The attention is on the stretch: The posture of the mind is uneasy; and the spirits being diverted from their natural course, are not govern'd in their movements by the same laws, at least not to the same degree, as when they flow in their usual channel.

If we desire similar instances, 'twill not be very difficult to find them. The present subject of metaphysics will supply us abundantly. The same argument, which wou'd have been esteem'd convincing in a reasoning concerning history or politics, has little or no influence in these abstruser subjects, even tho' it be perfectly comprehended; and that because there is requir'd a study and an effort of

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thought, in order to its being comprehended: And this effort of thought disturbs the operation of our sentiments, on which the belief depends. The case is the same in other subjects. The straining of the imagination always hinders the regular flowing of the passions and sentiments. A tragic poet, that wou'd represent his heroes as very ingenious and witty in their misfortunes, wou'd never touch the passions. As the emotions of the soul prevent any subtile reasoning and reflection, so these latter actions of the mind are equally prejudicial to the former. The mind, as well as the body, seems to be endow'd with a certain precise degree of force and activity, which it never employs in one action, but at the expense of all the rest. This is more evidently true, where the actions are of quite different natures; since in that case the force of the mind is not only diverted, but even the disposition chang'd, so as to render us incapable of a sudden transition from one action to the other, and still more of performing both at once. No wonder, then, the conviction, which arises from a subtile reasoning, diminishes in proportion to the efforts, which the imagination makes to enter into the reasoning, and to conceive it in all its parts. Belief, being a lively conception, can never be entire, where it is not founded on something natural and easy.

This I take to be the true state of the question, and cannot approve of that expeditious way, which some take with the sceptics, to reject at once all their arguments without enquiry or examination. If the sceptical reasonings be strong, say they, 'tis a proof, that reason may have some force and authority: if weak, they can never be sufficient to invalidate all the conclusions of our understanding. This argument is not just; because the sceptical reasonings, were it possible for them to exist, and were they not destroy'd by their subtility, wou'd be successively both strong and weak, according to the successive dispositions of the mind. Reason first appears in possession of the throne, prescribing laws, and imposing maxims, with an absolute sway and authority. Her enemy, therefore, is oblig'd to take shelter under her protection, and by making use of rational arguments to prove the fallaciousness and imbecility of reason, produces, in a manner, a patent under her hand and seal. This patent has at first an authority, proportion'd

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to the present and immediate authority of reason, from which it is deriv'd. But as it is suppos'd to be contradictory to reason, it gradually diminishes the force of that governing power and its own at the same time; till at last they both vanish away into nothing, by a regular and just diminution. The sceptical and dogmatical reasons are of the same kind, tho' contrary in their operation and tendency; so that where the latter is strong, it has an enemy of equal force in the former to encounter; and as their forces were at first equal, they still continue so, as long as either of them subsists; nor does one of them lose any force in the contest, without taking as much from its antagonist. 'Tis happy, therefore, that nature breaks the force of all sceptical arguments in time, and keeps them from having any considerable influence on the understanding. Were we to trust entirely to their self-destruction, that can never take place, 'till they have first subverted all conviction, and have totally destroy'd human reason.

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Thus the sceptic still continues to reason and believe, even tho' he asserts, that he cannot defend his reason by reason; and by the same rule he must assent to the principle concerning the existence of body, tho' he cannot pretend by any arguments of philosophy to maintain its veracity. Nature has not left this to his choice, and has doubtless esteem'd it an affair of too great importance to be trusted to our uncertain reasonings and speculations. We may well ask, *What causes induce us to believe in the existence of body?* but 'tis in vain to ask, *Whether there be body or not?* That is a point, which we must take for granted in all our reasonings.

The subject, then, of our present enquiry is concerning the *causes* which induce us to believe in the existence of body: And my reasonings on this head I shall begin with a distinction, which at first sight may seem superfluous, but which will contribute very much to the perfect understanding of what follows. We ought to examine apart those two questions, which are commonly confounded together, *viz.* Why we attribute a CONTINU'D existence to objects, even when they are not present to the senses; and why we sup-

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pose them to have an existence DISTINCT from the mind and perception. Under this last head I comprehend their situation as well as relations, their *external* position as well as the *independence* of their existence and operation. These two questions concerning the continu'd and distinct existence of body are intimately connected together. For if the objects of our senses continue to exist, even when they are not perceiv'd, their existence is of course independent of and distinct from the perception; and *vice versa*, if their existence be independent of the perception and distinct from it, they must continue to exist, even tho' they be not perceiv'd. But tho' the decision of the one question decides the other; yet that we may the more easily discover the principles of human nature, from whence the decision arises, we shall carry along with us this distinction, and shall consider, whether it be the *senses*, *reason*, or the *imagination*, that produces the opinion of a *continu'd* or of a *distinct* existence. These are the only questions, that are intelligible on the present subject. For as to the notion of external existence, when taken for something specially different from our perceptions,[1] we have already shewn its absurdity.

To begin with the SENSES, 'tis evident these faculties are incapable of giving rise to the notion of the *continu'd* existence of their objects, after they no longer appear to the senses. For that is a contradiction in terms, and supposes that the senses continue to operate, even after they have ceas'd all manner of operation. These faculties, therefore, if they have any influence in the present case, must produce the opinion of a distinct, not of a continu'd existence; and in order to that, must present their impressions either as images and representations, or as these very distinct and external existences.

That our senses offer not their impressions as the images of something *distinct*, or *independent*, and *external*, is evident; because they convey to us nothing but a single perception, and never give us the least intimation of any thing beyond. A single perception can never produce the idea of a double existence, but by some inference either of the reason or imagination. When the mind looks farther than what immediately appears to it, its conclusions can never be put to the account of the senses; and it certainly looks farther, when from a

[1] Part II. Sect. 6.

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single perception it infers a double existence, and supposes the relations of resemblance and causation betwixt them.

If our senses, therefore, suggest any idea of distinct existences, they must convey the impressions as those very existences, by a kind of fallacy and illusion. Upon this head we may observe, that all sensations are felt by the mind, such as they really are, and that when we doubt, whether they present themselves as distinct objects, or as mere impressions, the difficulty is not concerning their nature, but concerning their relations and situation.[1] Now if the senses presented our impressions as external to, and independent of ourselves, both the objects and ourselves must be obvious to our senses, otherwise they cou'd not be compar'd by these faculties. The difficulty, then, is how far we are *ourselves* the objects of our senses.

'Tis certain there is no question in philosophy more abstruse than that concerning identity, and the nature of the uniting principle, which constitutes a person. So far from being able by our senses merely to determine this question, we must have recourse to the most profound metaphysics to give a satisfactory answer to it; and in common life 'tis evident these ideas of self and person are never very fix'd nor determinate. 'Tis absurd, therefore, to imagine the senses can ever distinguish betwixt ourselves and external objects.

Add to this, that every impression, external and internal, passions, affections, sensations, pains and pleasures, are originally on the same footing;[2] and that whatever other differences we may observe among them, they appear, all of them, in their true colours, as impressions or perceptions. And indeed, if we consider the matter aright, 'tis scarce possible it shou'd be otherwise, nor is it conceivable that our senses shou'd be more capable of deceiving us in the situation and relations, than in the nature of our impressions. For since all actions and sensations of the mind are known to us by consciousness, they must necessarily appear in every particular what they are, and be what they appear. Every thing that enters the mind, being in *reality* a perception, 'tis impossible any thing shou'd to *feeling* appear different. This were to suppose, that even where we are most intimately conscious, we might be mistaken.

But not to lose time in examining, whether 'tis possible

[1] [Introd. §§ 250 and 251.]

[2] [Introd. § 240.]

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for our senses to deceive us, and represent our perceptions as distinct from ourselves, that is as *external* to and *independent* of us; let us consider whether they really do so, and whether this error proceeds from an immediate sensation, or from some other causes.

To begin with the question concerning *external* existence, it may perhaps be said, that setting aside the metaphysical question of the identity of a thinking substance, our own body evidently belongs to us; and as several impressions appear exterior to the body, we suppose them also exterior to ourselves. The paper, on which I write at present, is beyond my hand. The table is beyond the paper. The walls of the chamber beyond the table. And in casting my eye towards the window, I perceive a great extent of fields and buildings beyond my chamber. From all this it may be infer'd, that no other faculty is requir'd, beside the senses, to convince us of the external existence of body. But to prevent this inference, we need only weigh the three following considerations. *First*, That, properly speaking, 'tis not our body we perceive, when we regard our limbs and members, but certain impressions, which enter by the senses; so that the ascribing a real and corporeal existence to these impressions, or to their objects, is an act of the mind as difficult to explain, as that which we examine at present. *Secondly*, Sounds, and tastes, and smells, tho' commonly regarded by the mind as continu'd independent qualities, appear not to have any existence in extension, and consequently cannot appear to the senses as situated externally to the body.[1] The reason, why we ascribe a place to them, shall be consider'd afterwards.[2] *Thirdly*, Even our sight informs us not of distance or outness (so to speak) immediately and without a certain reasoning and experience, as is acknowledg'd by the most rational philosophers.

As to the *independency* of our perceptions on ourselves, this can never be an object of the senses; but any opinion we form concerning it, must be deriv'd from experience and observation: And we shall see afterwards, that our conclusions from experience are far from being favourable to the doctrine of the independency of our perceptions. Mean while we may observe that when we talk of real distinct existences, we have commonly more in our eye their independency than external

[1] [Introd. §§ 208 and 250.] [2] Sect. 5.

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situation in place, and think an object has a sufficient reality, when its Being is uninterrupted, and independent of the incessant revolutions, which we are conscious of in ourselves.

Thus to resume what I have said concerning the senses; they give us no notion of continu'd existence, because they cannot operate beyond the extent, in which they really operate. They as little produce the opinion of a distinct existence, because they neither can offer it to the mind as represented, nor as original. To offer it as represented, they must present both an object and an image. To make it appear as original, they must convey a falshood; and this falshood must lie in the relations and situation: In order to which they must be able to compare the object with ourselves; and even in that case they do not, nor is it possible they shou'd, deceive us. We may, therefore, conclude with certainty, that the opinion of a continu'd and of a distinct existence never arises from the senses.

To confirm this we may observe, that there are three different kinds of impressions convey'd by the senses. The first are those of the figure, bulk, motion and solidity of bodies. The second those of colours, tastes, smells, sounds, heat and cold. The third are the pains and pleasures, that arise from the application of objects to our bodies, as by the cutting of our flesh with steel, and such like. Both philosophers and the vulgar suppose the first of these to have a distinct continu'd existence. The vulgar only regard the second as on the same footing. Both philosophers and the vulgar, again, esteem the third to be merely perceptions; and consequently interrupted and dependent beings.

Now 'tis evident, that, whatever may be our philosophical opinion, colours, sounds, heat and cold, as far as appears to the senses, exist after the same manner with motion and solidity, and that the difference we make betwixt them in this respect, arises not from the mere perception. So strong is the prejudice for the distinct continu'd existence of the former qualities, that when the contrary opinion is advanc'd by modern philosophers, people imagine they can almost refute it from their feeling and experience, and that their very senses contradict this philosophy. 'Tis also evident, that colours, sounds, &c. are originally on the same footing with the pain that arises from steel, and pleasure that proceeds from a fire; and that the difference betwixt them is

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founded neither on perception nor reason, but on the imagination. For as they are confest to be, both of them, nothing but perceptions arising from the particular configurations and motions of the parts of body, wherein possibly can their difference consist? Upon the whole, then, we may conclude, that as far as the senses are judges, all perceptions are the same in the manner of their existence.[1]

We may also observe in this instance of sounds and colours, that we can attribute a distinct continu'd existence to objects without ever consulting REASON, or weighing our opinions by any philosophical principles. And indeed, whatever convincing arguments philosophers may fancy they can produce to establish the belief of objects independent of the mind, 'tis obvious these arguments are known but to very few, and that 'tis not by them, that children, peasants, and the greatest part of mankind are induc'd to attribute objects to some impressions, and deny them to others. Accordingly we find, that all the conclusions, which the vulgar form on this head, are directly contrary to those, which are confirm'd by philosophy. For philosophy informs us, that every thing, which appears to the mind, is nothing but a perception, and is interrupted, and dependent on the mind; whereas the vulgar confound perceptions and objects, and attribute a distinct continu'd existence to the very things they feel or see. This sentiment, then, as it is entirely unreasonable, must proceed from some other faculty than the understanding. To which we may add, that as long as we take our perceptions and objects to be the same, we can never infer the existence of the one from that of the other, nor form any argument from the relation of cause and effect; which is the only one that can assure us of matter of fact. Even after we distinguish our perceptions from our objects, 'twill appear presently, that we are still incapable of reasoning from the existence of one to that of the other: So that upon the whole our reason neither does, nor is it possible it ever shou'd, upon any supposition, give us an assurance of the continu'd and distinct existence of body. That opinion must be entirely owing to the IMAGINATION: which must now be the subject of our enquiry.

Since all impressions are internal and perishing existences,

[1] [Introd. § 251.]

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and appear as such, the notion of their distinct and continu'd existence must arise from a concurrence of some of their qualities with the qualities of the imagination, and since this notion does not extend to all of them, it must arise from certain qualities peculiar to some impressions. 'Twill therefore be easy for us to discover these qualities by a comparison of the impressions, to which we attribute a distinct and continu'd existence, with those, which we regard as internal and perishing.

We may observe, then, that 'tis neither upon account of the involuntariness of certain impressions, as is commonly suppos'd, nor of their superior force and violence, that we attribute to them a reality, and continu'd existence, which we refuse to others, that are voluntary or feeble. For 'tis evident our pains and pleasures, our passions and affections, which we never suppose to have any existence beyond our perception, operate with greater violence, and are equally involuntary, as the impressions of figure and extension, colour and sound, which we suppose to be permanent beings. The heat of a fire, when moderate, is suppos'd to exist in the fire; but the pain, which it causes upon a near approach, is not taken to have any being except in the perception.

These vulgar opinions, then, being rejected, we must search for some other hypothesis, by which we may discover those peculiar qualities in our impressions, which makes us attribute to them a distinct and continu'd existence.

After a little examination, we shall find, that all those objects, to which we attribute a continu'd existence, have a peculiar *constancy*, which distinguishes them from the impressions, whose existence depends upon our perception. Those mountains, and houses, and trees, which lie at present under my eye, have always appear'd to me in the same order; and when I lose sight of them by shutting my eyes or turning my head, I soon after find them return upon me without the least alteration. My bed and table, my books and papers, present themselves in the same uniform manner, and change not upon account of any interruption in my seeing or perceiving them. This is the case with all the impressions, whose objects are suppos'd to have an external existence; and is the case with no other impressions, whether gentle or violent, voluntary or involuntary.

This constancy, however, is not so perfect as not to admit

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of very considerable exceptions. Bodies often change their position and qualities, and after a little absence or interruption may become hardly knowable. But here 'tis observable, that even in these changes they preserve a *coherence*, and have a regular dependence on each other; which is the foundation of a kind of reasoning from causation, and produces the opinion of their continu'd existence. When I return to my chamber after an hour's absence, I find not my fire in the same situation, in which I left it: But then I am accustom'd in other instances to see a like alteration produc'd in a like time, whether I am present or absent, near or remote. This coherence, therefore, in their changes is one of the characteristics of external objects, as well as their constancy.

Having found that the opinion of the continu'd existence of body depends on the COHERENCE and CONSTANCY of certain impressions, I now proceed to examine after what manner these qualities give rise to so extraordinary an opinion. To begin with the coherence; we may observe, that tho' those internal impressions, which we regard as fleeting and perishing, have also a certain coherence or regularity in their appearances, yet 'tis of somewhat a different nature, from that which we discover in bodies.[1] Our passions are found by experience to have a mutual connexion with and dependance on each other; but on no occasion is it necessary to suppose, that they have existed and operated, when they were not perceiv'd, in order to preserve the same dependance and connexion, of which we have had experience. The case is not the same with relation to external objects. Those require a continu'd existence, or otherwise lose, in a great measure, the regularity of their operation. I am here seated in my chamber with my face to the fire; and all the objects, that strike my senses, are contain'd in a few yards around me. My memory, indeed, informs me of the existence of many objects; but then this information extends not beyond their past existence, nor do either my senses or memory give any testimony to the continuance of their being. When therefore I am thus seated, and revolve over these thoughts, I hear on a sudden a noise as of a door turning upon its hinges; and a little after see a porter, who

[1] [Contrast the statement made below—'The very image which is present to the senses is with us the real body.'—Page 493.]

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advances towards me. This gives occasion to many new reflections and reasonings. First, I never have observ'd, that this noise cou'd proceed from any thing but the motion of a door; and therefore conclude, that the present phænomenon is a contradiction to all past experience, unless the door, which I remember on t'other side the chamber, be still in being. Again, I have always found, that a human body was possest of a quality, which I call gravity, and which hinders it from mounting in the air, as this porter must have done to arrive at my chamber, unless the stairs I remember be not annihilated by my absence. But this is not all. I receive a letter, which upon opening it I perceive by the hand-writing and subscription to have come from a friend, who says he is two hundred leagues distant. 'Tis evident I can never account for this phænomenon, conformable to my experience in other instances, without spreading out in my mind the whole sea and continent between us, and supposing the effects and continu'd existence of posts and ferries, according to my memory and observation. To consider these phænomena of the porter and letter in a certain light, they are contradictions to common experience, and may be regarded as objections to those maxims, which we form concerning the connexions of causes and effects. I am accustom'd to hear such a sound, and see such an object in motion at the same time. I have not receiv'd in this particular instance both these perceptions. These observations are contrary, unless I suppose that the door still remains, and that it was open'd without my perceiving it: And this supposition, which was at first entirely arbitrary and hypothetical, acquires a force and evidence by its being the only one, upon which I can reconcile these contradictions. There is scarce a moment of my life, wherein there is not a similar instance presented to me, and I have not occasion to suppose the continu'd existence of objects, in order to connect their past and present appearances, and give them such an union with each other, as I have found by experience to be suitable to their particular natures and circumstances. Here then I am naturally led to regard the world, as something real and durable, and as preserving its existence, even when it is no longer present to my perception.

But tho' this conclusion from the coherence of appearances may seem to be of the same nature with our reasonings

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concerning causes and effects; as being deriv'd from custom, and regulated by past experience; we shall find upon examination, that they are at the bottom considerably different from each other, and that this inference arises from the understanding, and from custom in an indirect and oblique manner. For 'twill readily be allow'd, that since nothing is ever really present to the mind, besides its own perceptions, 'tis not only impossible, that any habit shou'd ever be acquir'd otherwise than by the regular succession of these perceptions, but also that any habit shou'd ever exceed that degree of regularity. Any degree, therefore, of regularity in our perceptions, can never be a foundation for us to infer a greater degree of regularity in some objects, which are not perceiv'd; since this supposes a contradiction, *viz.* a habit acquir'd by what was never present to the mind.[1] But 'tis evident, that whenever we infer the continu'd existence of the objects of sense from their coherence, and the frequency of their union, 'tis in order to bestow on the objects a greater regularity than what is observ'd in our mere perceptions. We remark a connexion betwixt two kinds of objects in their past appearance to the senses, but are not able to observe this connexion to be perfectly constant, since the turning about of our head or the shutting of our eyes is able to break it. What then do we suppose in this case, but that these objects still continue their usual connexion, notwithstanding their apparent interruption, and that the irregular appearances are join'd by something, of which we are insensible? But as all reasoning concerning matters of fact arises only from custom, and custom can only be the effect of repeated perceptions, the extending of custom and reasoning beyond the perceptions can never be the direct and natural effect of the constant repetition and connexion, but must arise from the co-operation of some other principles.

I have already observ'd,[2] in examining the foundation of mathematics, that the imagination, when set into any train of thinking, is apt to continue, even when its object fails it, and like a galley put in motion by the oars, carries on its course without any new impulse. This I have assign'd for the reason, why, after considering several loose standards of equality, and correcting them by each other, we proceed to imagine so correct and exact a standard of that relation,

[1] [Introd. § 303.]

[2] Part II. Sect. 4.

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as is not liable to the least error or variation. The same principle makes us easily entertain this opinion of the continu'd existence of body. Objects have a certain coherence even as they appear to our senses; but this coherence is much greater and more uniform, if we suppose the objects to have a continu'd existence; and as the mind is once in the train of observing an uniformity among objects, it naturally continues, till it renders the uniformity as compleat as possible. The simple supposition of their continu'd existence suffices for this purpose, and gives us a notion of a much greater regularity among objects, than what they have when we look no farther than our senses.

But whatever force we may ascribe to this principle, I am afraid 'tis too weak to support alone so vast an edifice, as is that of the continu'd existence of all external bodies; and that we must join the *constancy* of their appearance to the *coherence*, in order to give a satisfactory account of that opinion. As the explication of this will lead me into a considerable compass of very profound reasoning; I think it proper, in order to avoid confusion, to give a short sketch or abridgment of my system, and afterwards draw out all its parts in their full compass. This inference from the constancy of our perceptions, like the precedent from their coherence, gives rise to the opinion of the *continu'd* existence of body, which is prior to that of its *distinct* existence, and produces that latter principle.

When we have been accustom'd to observe a constancy in certain impressions, and have found, that the perception of the sun or ocean, for instance, returns upon us after an absence or annihilation with like parts and in a like order, as at its first appearance, we are not apt to regard these interrupted perceptions as different, (which they really are) but on the contrary consider them as individually the same, upon account of their resemblance. But as this interruption of their existence is contrary to their perfect identity, and makes us regard the first impression as annihilated, and the second as newly created, we find ourselves somewhat at a loss, and are involv'd in a kind of contradiction. In order to free ourselves from this difficulty, we disguise, as much as possible, the interruption, or rather remove it entirely, by supposing that these interrupted perceptions are connected by a real existence, of which we are insensible. This sup-

position, or idea of continu d existence, acquires a force and vivacity from the memory of these broken impressions, and from that propensity, which they give us, to suppose them the same; and according to the precedent reasoning, the very essence of belief consists in the force and vivacity of the conception.

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In order to justify this system, there are four things requisite. *First*, To explain the *principium individuationis*, or principle of identity. *Secondly*, Give a reason, why the resemblance of our broken and interrupted perceptions induces us to attribute an identity to them. *Thirdly*, Account for that propensity, which this illusion gives, to unite these broken appearances by a continu'd existence. *Fourthly* and lastly, Explain that force and vivacity of conception, which arises from the propensity.

First, As to the principle of individuation; we may observe, that the view of any one object is not sufficient to convey the idea of identity. For in that proposition, *an object is the same with itself*, if the idea express'd by the word, *object*, were no ways distinguish'd from that meant by *itself*; we really shou'd mean nothing, nor wou'd the proposition contain a predicate and a subject, which however are imply'd in this affirmation. One single object conveys the idea of unity, not that of identity.

On the other hand, a multiplicity of objects can never convey this idea, however resembling they may be suppos'd. The mind always pronounces the one not to be the other, and considers them as forming two, three, or any determinate number of objects, whose existences are entirely distinct and independent.

Since then both number and unity are incompatible with the relation of identity, it must lie in something that is neither of them. But to tell the truth, at first sight this seems utterly impossible. Betwixt unity and number there can be no medium; no more than betwixt existence and non-existence. After one object is suppos'd to exist, we must either suppose another also to exist; in which case we have the idea of number: Or we must suppose it not to exist; in which case the first object remains at unity.

To remove this difficulty, let us have recourse to the idea of time or duration. I have already observ'd,[1] that time, in

[1] Part II. Sect. 5.

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a strict sense, implies succession, and that when we apply its idea to any unchangeable object, 'tis only by a fiction of the imagination, by which the unchangeable object is suppos'd to participate of the changes of the co-existent objects, and in particular of that of our perceptions. The fiction of the imagination almost universally takes place; and 'tis by means of it, that a single object, plac'd before us, and survey'd for any time without our discovering in it any interruption or variation, is able to give us a notion of identity. For when we consider any two points of this time, we may place them in different lights: We may either survey them at the very same instant; in which case they give us the idea of number, both by themselves and by the object; which must be multiply'd, in order to be conceiv'd at once, as existent in these two different points of time: Or on the other hand, we may trace the succession of time by a like succession of ideas, and conceiving first one moment, along with the object then existent, imagine afterwards a change in the time without any *variation* or *interruption* in the object; in which case it gives us the idea of unity.[1] Here then is an idea, which is a medium betwixt unity and number; or more properly speaking, is either of them, according to the view, in which we take it: And this idea we call that of identity. We cannot, in any propriety of speech, say, that an object is the same with itself, unless we mean, that the object existent at one time is the same with itself existent at another. By this means we make a difference, betwixt the idea meant by the word, *object*, and that meant by *itself*, without going the length of number, and at the same time without restraining ourselves to a strict and absolute unity.

Thus the principle of individuation is nothing but the *invariableness* and *uninterruptedness* of any object, thro' a suppos'd variation of time, by which the mind can trace it in the different periods of its existence, without any break of the view, and without being oblig'd to form the idea of multiplicity or number.[2]

I now proceed to explain the *second* part of my system, and shew why the constancy of our perceptions makes us ascribe to them a perfect numerical identity, tho' there be very long intervals betwixt their appearance, and they have only one of the essential qualities of identity, *viz. invariableness.*

[1] [Introd. § 257.] [2] [Introd. § 303.]

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That I may avoid all ambiguity and confusion on this head, I shall observe, that I here account for the opinions and belief of the vulgar with regard to the existence of body; and therefore must entirely conform myself to their manner of thinking and of expressing themselves. Now we have already observ'd, that however philosophers may distinguish betwixt the objects and perceptions of the senses; which they suppose co-existent and resembling; yet this is a distinction, which is not comprehended by the generality of mankind, who as they perceive only one being, can never assent to the opinion of a double existence and representation. Those very sensations, which enter by the eye or ear, are with them the true objects, nor can they readily conceive that this pen or paper, which is immediately perceiv'd, represents another, which is different from, but resembling it. In order, therefore, to accommodate myself to their notions, I shall at first suppose; that there is only a single existence, which I shall call indifferently *object* or *perception*, according as it shall seem best to suit my purpose, understanding by both of them what any common man means by a hat, or shoe, or stone, or any other impression, convey'd to him by his senses.[1] I shall be sure to give warning, when I return to a more philosophical way of speaking and thinking.

To enter, therefore, upon the question concerning the source of the error and deception with regard to identity, when we attribute it to our resembling perceptions, notwithstanding their interruption; I must here recal an observation, which I have already prov'd and explain'd.[2] Nothing is more apt to make us mistake one idea for another, than any relation betwixt them, which associates them together in the imagination, and makes it pass with facility from one to the other. Of all relations, that of resemblance is in this respect the most efficacious; and that because it not only causes an association of ideas, but also of dispositions, and makes us conceive the one idea by an act or operation of the mind, similar to that by which we conceive the other. This circumstance I have observ'd to be of great moment; and we may establish it for a general rule, that whatever ideas place the mind in the same disposition or in similar ones, are very apt to be confounded. The mind

[1] [Introd. § 304.]

[2] Part II. Sect. 5.

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readily passes from one to the other, and perceives not the change without a strict attention, of which, generally speaking, 'tis wholly incapable.

In order to apply this general maxim, we must first examine the disposition of the mind in viewing any object which preserves a perfect identity, and then find some other object, that is confounded with it, by causing a similar disposition. When we fix our thought on any object, and suppose it to continue the same for some time; 'tis evident we suppose the change to lie only in the time, and never exert ourselves to produce any new image or idea of the object. The faculties of the mind repose themselves in a manner, and take no more exercise, than what is necessary to continue that idea, of which we were formerly possest, and which subsists without variation or interruption. The passage from one moment to another is scarce felt, and distinguishes not itself by a different perception or idea, which may require a different direction of the spirits, in order to its conception.

Now what other objects, beside identical ones, are capable of placing the mind in the same disposition, when it considers them, and of causing the same uninterrupted passage of the imagination from one idea to another? This question is of the last importance. For if we can find any such objects, we may certainly conclude, from the foregoing principle, that they are very naturally confounded with identical ones, and are taken for them in most of our reasonings. But tho' this question be very important, 'tis not very difficult nor doubtful. For I immediately reply, that a succession of related objects places the mind in this disposition, and is consider'd with the same smooth and uninterrupted progress of the imagination, as attends the view of the same invariable object. The very nature and essence of relation is to connect our ideas with each other, and upon the appearance of one, to facilitate the transition to its correlative. The passage betwixt related ideas is, therefore, so smooth and easy, that it produces little alteration on the mind, and seems like the continuation of the same action; and as the continuation of the same action is an effect of the continu'd view of the same object, 'tis for this reason we attribute sameness to every succession of related objects. The thought slides along the succession with equal facility,

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as if it consider'd only one object; and therefore confounds the succession with the identity.

We shall afterwards see many instances of this tendency of relation to make us ascribe an *identity* to *different* objects; but shall here confine ourselves to the present subject. We find by experience, that there is such a *constancy* in almost all the impressions of the senses, that their interruption produces no alteration on them, and hinders them not from returning the same in appearance and in situation as at their first existence. I survey the furniture of my chamber; I shut my eyes, and afterwards open them; and find the new perceptions to resemble perfectly those, which formerly struck my senses.[1] 'This resemblance is observ'd in a thousand instances, and naturally connects together our ideas of these interrupted perceptions by the strongest relation, and conveys the mind with an easy transition from one to another. An easy transition or passage of the imagination, along the ideas of these different and interrupted perceptions, is almost the same disposition of mind with that in which we consider one constant and uninterrupted perception. 'Tis therefore very natural for us to mistake the one for the other.[2]

The persons, who entertain this opinion concerning the identity of our resembling perceptions, are in general all the unthinking and unphilosophical part of mankind, (that is, all of us, at one time or other) and consequently such as suppose their perceptions to be their only objects, and never think of a double existence internal and external, representing and represented. The very image, which is present to the senses, is with us the real body; and 'tis to these interrupted images we ascribe a perfect identity.[3] But as the interruption of the appearance seems contrary to the identity, and naturally leads us to regard these resembling perceptions as different from each other, we here find ourselves at

[1] [Introd. § 305.]

[2] This reasoning, it must be confest, is somewhat abstruse and difficult to be comprehended; but it is remarkable, that this very difficulty may be converted into a proof of the reasoning. We may observe, that there are two relations, and both of them resemblances, which contribute to our mistaking the succession of our interrupted perceptions for an identical object. The first is, the resemblance of the perceptions: The second is the resemblance, which the act of the mind in surveying a succession of resembling objects bears to that in surveying an identical object. Now these resemblances we are apt to confound with each other; and 'tis natural we shou'd, according to this very reasoning. But let us keep them distinct, and we shall find no difficulty in conceiving the precedent argument.

[3] [Introd. § 306.]

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a loss how to reconcile such opposite opinions. The smooth passage of the imagination along the ideas of the resembling perceptions makes us ascribe to them a perfect identity. The interrupted manner of their appearance makes us consider them as so many resembling, but still distinct beings, which appear after certain intervals. The perplexity arising from this contradiction produces a propension to unite these broken appearances by the fiction of a continu'd existence, which is the *third* part of that hypothesis I propos'd to explain.

Nothing is more certain from experience, than that any contradiction either to the sentiments or passions gives a sensible uneasiness, whether it proceeds from without or from within; from the opposition of external objects, or from the combat of internal principles. On the contrary, whatever strikes in with the natural propensities, and either externally forwards their satisfaction, or internally concurs with their movements, is sure to give a sensible pleasure. Now there being here an opposition betwixt the notion of the identity of resembling perceptions, and the interruption of their appearance, the mind must be uneasy in that situation, and will naturally seek relief from the uneasiness. Since the uneasiness arises from the opposition of two contrary principles, it must look for relief by sacrificing the one to the other. But as the smooth passage of our thought along our resembling perceptions makes us ascribe to them an identity, we can never without reluctance yield up that opinion. We must, therefore, turn to the other side, and suppose that our perceptions are no longer interrupted, but preserve a continu'd as well as an invariable existence, and are by that means entirely the same. But here the interruptions in the appearance of these perceptions are so long and frequent, that 'tis impossible to overlook them; and as the *appearance* of a perception in the mind and its *existence* seem at first sight entirely the same, it may be doubted, whether we can ever assent to so palpable a contradiction, and suppose a perception to exist without being present to the mind. In order to clear up this matter, and learn how the interruption in the appearance of a perception implies not necessarily an interruption in its existence, 'twill be proper to touch upon some principles, which we shall have occasion to explain more fully afterwards.[1]

[1] Sect. 6.

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We may begin with observing, that the difficulty in the present case is not concerning the matter of fact, or whether the mind forms such a conclusion concerning the continu'd existence of its perceptions, but only concerning the manner in which the conclusion is form'd, and principles from which it is deriv'd. 'Tis certain, that almost all mankind, and even philosophers themselves, for the greatest part of their lives, take their perceptions to be their only objects, and suppose, that the very being, which is intimately present to the mind, is the real body or material existence. 'Tis also certain, that this very perception or object is suppos'd to have a continu'd uninterrupted being, and neither to be annihilated by our absence, nor to be brought into existence by our presence. When we are absent from it, we say it still exists, but that we do not feel, we do not see it. When we are present, we say we feel, or see it. Here then may arise two questions; *First*, How we can satisfy ourselves in supposing a perception to be absent from the mind without being annihilated. *Secondly*, After what manner we conceive an object to become present to the mind, without some new creation of a perception or image; and what we mean by this *seeing*, and *feeling*, and *perceiving*.

As to the first question; we may observe, that what we call a *mind*, is nothing but a heap or collection of different perceptions, united together by certain relations, and suppos'd, tho' falsely, to be endow'd with a perfect simplicity and identity. Now as every perception is distinguishable from another, and may be consider'd as separately existent; it evidently follows, that there is no absurdity in separating any particular perception from the mind; that is, in breaking off all its relations, with that connected mass of perceptions, which constitute a thinking being.[1]

The same reasoning affords us an answer to the second question. If the name of *perception* renders not this separation from a mind absurd and contradictory, the name of *object*, standing for the very same thing, can never render their conjunction impossible. External objects are seen, and felt, and become present to the mind; that is, they acquire such a relation to a connected heap of perceptions, as to influence them very considerably in augmenting their number by present reflections and passions, and in storing the memory

[1] [Introd. § 306.]

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with ideas. The same continu'd and uninterrupted Being may, therefore, be sometimes present to the mind, and sometimes absent from it, without any real or essential change in the Being itself. An interrupted appearance to the senses implies not necessarily an interruption in the existence. The supposition of the continu'd existence of sensible objects or perceptions involves no contradiction. We may easily indulge our inclination to that supposition. When the exact resemblance of our perceptions makes us ascribe to them an identity, we may remove the seeming interruption by feigning a continu'd being, which may fill those intervals, and preserve a perfect and entire identity to our perceptions.

But as we here not only *feign* but *believe* this continu'd existence, the question is, *from whence arises such a belief*; and this question leads us to the *fourth* member of this system. It has been prov'd already, that belief in general consists in nothing, but the vivacity of an idea; and that an idea may acquire this vivacity by its relation to some present impression. Impressions are naturally the most vivid perceptions of the mind; and this quality is in part convey'd by the relation to every connected idea. The relation causes a smooth passage from the impression to the idea, and even gives a propensity to that passage. The mind falls so easily from the one perception to the other, that it scarce perceives the change, but retains in the second a considerable share of the vivacity of the first. It is excited by the lively impression; and this vivacity is convey'd to the related idea, without any great diminution in the passage, by reason of the smooth transition and the propensity of the imagination.

But suppose, that this propensity arises from some other principle, besides that of relation; 'tis evident it must still have the same effect, and convey the vivacity from the impression to the idea. Now this is exactly the present case. Our memory presents us with a vast number of instances of perceptions perfectly resembling each other, that return at different distances of time, and after considerable interruptions. This resemblance gives us a propension to consider these interrupted perceptions as the same; and also a propension to connect them by a continu'd existence, in order to justify this identity, and avoid the contradiction, in which the interrupted appearance of these perceptions seems necessarily to involve us. Here then we have a propensity to

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feign the continu'd existence of all sensible objects; and as this propensity arises from some lively impressions of the memory, it bestows a vivacity on that fiction; or in other words, makes us believe the continu'd existence of body.[1] If sometimes we ascribe a continu'd existence to objects, which are perfectly new to us, and of whose constancy and coherence we have no experience, 'tis because the manner, in which they present themselves to our senses, resembles that of constant and coherent objects; and this resemblance is a source of reasoning and analogy, and leads us to attribute the same qualities to similar objects.

I believe an intelligent reader will find less difficulty to assent to this system, than to comprehend it fully and distinctly, and will allow, after a little reflection, that every part carries its own proof along with it. 'Tis indeed evident, that as the vulgar *suppose* their perceptions to be their only objects, and at the same time *believe* the continu'd existence of matter, we must account for the origin of the belief upon that supposition. Now upon that supposition, 'tis a false opinion that any of our objects, or perceptions, are identically the same after an interruption; and consequently the opinion of their identity can never arise from reason, but must arise from the imagination. The imagination is seduc'd into such an opinion only by means of the resemblance of certain perceptions; since we find they are only our resembling perceptions, which we have a propension to suppose the same. This propension to bestow an identity on our resembling perceptions, produces the fiction of a continu'd existence; since that fiction, as well as the identity, is really false, as is acknowledg'd by all philosophers, and has no other effect than to remedy the interruption of our perceptions, which is the only circumstance that is contrary to their identity. In the last place this propension causes belief by means of the present impressions of the memory; since without the remembrance of former sensations, 'tis plain we never shou'd have any belief of the continu'd existence of body. Thus in examining all these parts, we find that each of them is supported by the strongest proofs; and that all of them together form a consistent system, which is perfectly convincing. A strong propensity or inclination alone, without any present impression, will sometimes

[1] [Introd. § 310.]

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cause a belief or opinion. How much more when aided by that circumstance?

But tho' we are led after this manner, by the natural propensity of the imagination, to ascribe a continu'd existence to those sensible objects or perceptions, which we find to resemble each other in their interrupted appearance; yet a very little reflection and philosophy is sufficient to make us perceive the fallacy of that opinion. I have already observ'd, that there is an intimate connexion betwixt those two principles, of a *continu'd* and of a *distinct* or *independent* existence, and that we no sooner establish the one than the other follows, as a necessary consequence. 'Tis the opinion of a continu'd existence, which first takes place, and without much study or reflection draws the other along with it, wherever the mind follows its first and most natural tendency. But when we compare experiments, and reason a little upon them, we quickly perceive, that the doctrine of the independent existence of our sensible perceptions is contrary to the plainest experience. This leads us backward upon our footsteps to perceive our error in attributing a continu'd existence to our perceptions, and is the origin of many very curious opinions, which we shall here endeavour to account for.

'Twill first be proper to observe a few of those experiments, which convince us, that our perceptions are not possest of any independent existence. When we press one eye with a finger, we immediately perceive all the objects to become double, and one half of them to be remov'd from their common and natural position. But as we do not attribute a continu'd existence to both these perceptions, and as they are both of the same nature, we clearly perceive, that all our perceptions are dependent on our organs, and the disposition of our nerves and animal spirits. This opinion is confirm'd by the seeming encrease and diminution of objects, according to their distance; by the apparent alterations in their figure; by the changes in their colour and other qualities from our sickness and distempers; and by an infinite number of other experiments of the same kind; from all which we learn, that our sensible perceptions are not possest of any distinct or independent existence.

The natural consequence of this reasoning shou'd be, that our perceptions have no more a continu'd than an inde-

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pendent existence; and indeed philosophers have so far run into this opinion, that they change their system, and distinguish, (as we shall do for the future) betwixt perceptions and objects, of which the former are suppos'd to be interrupted, and perishing, and different at every different return; the latter to be uninterrupted, and to preserve a continu'd existence and identity. But however philosophical this new system may be esteem'd, I assert that 'tis only a palliative remedy, and that it contains all the difficulties of the vulgar system, with some others, that are peculiar to itself. There are no principles either of the understanding or fancy, which lead us directly to embrace this opinion of the double existence of perceptions and objects, nor can we arrive at it but by passing thro' the common hypothesis of the identity and continuance of our interrupted perceptions. Were we not first perswaded, that our perceptions are our only objects, and continue to exist even when they no longer make their appearance to the senses, we shou'd never be led to think, that our perceptions and objects are different, and that our objects alone preserve a continu'd existence. 'The latter hypothesis has no primary recommendation either to reason or the imagination, but acquires all its influence on the imagination from the former.' This proposition contains two parts, which we shall endeavour to prove as distinctly and clearly, as such abstruse subjects will permit.

As to the first part of the proposition, *that this philosophical hypothesis has no primary recommendation, either to reason or the imagination*, we may soon satisfy ourselves with regard to *reason* by the following reflections. The only existences, of which we are certain, are perceptions, which being immediately present to us by consciousness, command our strongest assent, and are the first foundation of all our conclusions. The only conclusion we can draw from the existence of one thing to that of another, is by means of the relation of cause and effect, which shews, that there is a connexion betwixt them, and that the existence of one is dependent on that of the other. The idea of this relation is deriv'd from past experience, by which we find, that two beings are constantly conjoin'd together, and are always present at once to the mind. But as no beings are ever present to the mind but perceptions; it follows that we may observe a conjunction or a relation of cause and effect be-

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tween different perceptions, but can never observe it between perceptions and objects. 'Tis impossible, therefore, that from the existence or any of the qualities of the former, we can ever form any conclusion concerning the existence of the latter, or ever satisfy our reason in this particular.

'Tis no less certain, that this philosophical system has no primary recommendation to the *imagination*, and that that faculty wou'd never, of itself, and by its original tendency, have fallen upon such a principle. I confess it will be somewhat difficult to prove this to the full satisfaction of the reader; because it implies a negative, which in many cases will not admit of any positive proof. If any one wou'd take the pains to examine this question, and wou'd invent a system, to account for the direct origin of this opinion from the imagination, we shou'd be able, by the examination of that system, to pronounce a certain judgment in the present subject. Let it be taken for granted, that our perceptions are broken, and interrupted, and however like, are still different from each other; and let any one upon this supposition shew why the fancy, directly and immediately, proceeds to the belief of another existence, resembling these perceptions in their nature, but yet continu'd, and uninterrupted, and identical; and after he has done this to my satisfaction, I promise to renounce my present opinion. Mean while I cannot forbear concluding, from the very abstractedness and difficulty of the first supposition, that 'tis an improper subject for the fancy to work upon. Whoever wou'd explain the origin of the *common* opinion concerning the continu'd and distinct existence of body, must take the mind in its *common* situation, and must proceed upon the supposition, that our perceptions are our only objects, and continue to exist even when they are not perceiv'd. Tho' this opinion be false, 'tis the most natural of any, and has alone any primary recommendation to the fancy.

As to the second part of the proposition, *that the philosophical system acquires all its influence on the imagination from the vulgar one*; we may observe, that this is a natural and unavoidable consequence of the foregoing conclusion, *that it has no primary recommendation to reason or the imagination.*[1] For as the philosophical system is found by experience to take hold of many minds, and in particular of

[1] [Introd. § 307.]

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all those, who reflect ever so little on this subject, it must derive all its authority from the vulgar system; since it has no original authority of its own. The manner, in which these two systems, tho' directly contrary, are connected together, may be explain'd, as follows.

The imagination naturally runs on in this train of thinking. Our perceptions are our only objects: Resembling perceptions are the same, however broken or uninterrupted in their appearance: This appearing interruption is contrary to the identity: The interruption consequently extends not beyond the appearance, and the perception or object really continues to exist, even when absent from us: Our sensible perceptions have, therefore, a continu'd and uninterrupted existence. But as a little reflection destroys this conclusion, that our perceptions have a continu'd existence, by shewing that they have a dependent one, 'twou'd naturally be expected, that we must altogether reject the opinion, that there is such a thing in nature as a continu'd existence, which is preserv'd even when it no longer appears to the senses. The case, however, is otherwise. Philosophers are so far from rejecting the opinion of a continu'd existence upon rejecting that of the independence and continuance of our sensible perceptions, that tho' all sects agree in the latter sentiment, the former, which is, in a manner, its necessary consequence, has been peculiar to a few extravagant sceptics; who after all maintain'd that opinion in words only, and were never able to bring themselves sincerely to believe it.

There is a great difference betwixt such opinions as we form after a calm and profound reflection, and such as we embrace by a kind of instinct or natural impulse, on account of their suitableness and conformity to the mind. If these opinions become contrary, 'tis not difficult to foresee which of them will have the advantage. As long as our attention is bent upon the subject, the philosophical and study'd principle may prevail; but the moment we relax our thoughts, nature will display herself, and draw us back to our former opinion. Nay she has sometimes such an influence, that she can stop our progress, even in the midst of our most profound reflections, and keep us from running on with all the consequences of any philosophical opinion. Thus tho' we clearly perceive the dependence and interruption of our perceptions, we stop short in our career, and never upon that

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account reject the notion of an independent and continu'd existence. That opinion has taken such deep root in the imagination, that 'tis impossible ever to eradicate it, nor will any strain'd metaphysical conviction of the dependence of our perceptions be sufficient for that purpose.

But tho' our natural and obvious principles here prevail above our study'd reflections, 'tis certain there must be some struggle and opposition in the case; at least so long as these reflections retain any force or vivacity. In order to set ourselves at ease in this particular, we contrive a new hypothesis, which seems to comprehend both these principles of reason and imagination. This hypothesis is the philosophical one of the double existence of perceptions and objects; which pleases our reason, in allowing, that our dependent perceptions are interrupted and different; and at the same time is agreeable to the imagination, in attributing a continu'd existence to something else, which we call *objects*. This philosophical system, therefore, is the monstrous offspring of two principles, which are contrary to each other, which are both at once embrac'd by the mind, and which are unable mutually to destroy each other. The imagination tells us, that our resembling perceptions have a continu'd and uninterrupted existence, and are not annihilated by their absence. Reflection tells us, that even our resembling perceptions are interrupted in their existence, and different from each other. The contradiction betwixt these opinions we elude by a new fiction, which is conformable to the hypotheses both of reflection and fancy, by ascribing these contrary qualities to different existences; the *interruption* to perceptions, and the *continuance* to objects.[1] Nature is obstinate, and will not quit the field, however strongly attack'd by reason; and at the same time reason is so clear in the point, that there is no possibility of disguising her. Not being able to reconcile these two enemies, we endeavour to set ourselves at ease as much as possible, by successively granting to each what it demands, and by feigning a double existence, where each may find something, that has all the conditions it desires. Were we fully convinc'd, that our resembling perceptions are continu'd, and identical, and independent, we shou'd never run into this opinion of a double existence; since we shou'd find satisfaction in our first sup-

[1] [Introd. § 308.]

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position, and wou'd not look beyond. Again, were we fully convinc'd, that our perceptions are dependent, and interrupted, and different, we shou'd be as little inclin'd to embrace the opinion of a double existence; since in that case we shou'd clearly perceive the error of our first supposition of a continu'd existence, and wou'd never regard it any farther. 'Tis therefore from the intermediate situation of the mind, that this opinion arises, and from such an adherence to these two contrary principles, as makes us seek some pretext to justify our receiving both; which happily at last is found in the system of a double existence.

Another advantage of this philosophical system is its similarity to the vulgar one; by which means we can humour our reason for a moment, when it becomes troublesome and sollicitous; and yet upon its least negligence or inattention, can easily return to our vulgar and natural notions. Accordingly we find, that philosophers neglect not this advantage; but immediately upon leaving their closets, mingle with the rest of mankind in those exploded opinions, that our perceptions are our only objects, and continue identically and uninterruptedly the same in all their interrupted appearances.

There are other particulars of this system, wherein we may remark its dependence on the fancy, in a very conspicuous manner. Of these, I shall observe the two following. *First*, We suppose external objects to resemble internal perceptions. I have already shewn, that the relation of cause and effect can never afford us any just conclusion from the existence or qualities of our perceptions to the existence of external continu'd objects: And I shall farther add, that even tho' they cou'd afford such a conclusion, we shou'd never have any reason to infer, that our objects resemble our perceptions. That opinion, therefore, is deriv'd from nothing but the quality of the fancy above-explain'd, *that it borrows all its ideas from some precedent perception.* We never can conceive any thing but perceptions, and therefore must make every thing resemble them.

Secondly, As we suppose our objects in general to resemble our perceptions, so we take it for granted, that every particular object resembles that perception, which it causes. The relation of cause and effect determines us to join the other of resemblance; and the ideas of these existences being

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already united together in the fancy by the former relation, we naturally add the latter to compleat the union. We have a strong propensity to compleat every union by joining new relations to those which we have before observ'd betwixt any ideas, as we shall have occasion to observe presently.[1]

Having thus given an account of all the systems both popular and philosophical, with regard to external existences, I cannot forbear giving vent to a certain sentiment, which arises upon reviewing those systems. I begun this subject with premising, that we ought to have an implicit faith in our senses, and that this wou'd be the conclusion, I shou'd draw from the whole of my reasoning. But to be ingenuous, I feel myself *at present* of a quite contrary sentiment, and am more inclin'd to repose no faith at all in my senses, or rather imagination, than to place in it such an implicit confidence. I cannot conceive how such trivial qualities of the fancy, conducted by such false suppositions, can ever lead to any solid and rational system. They are the coherence and constancy of our perceptions, which produce the opinion of their continu'd existence; tho' these qualities of perceptions have no perceivable connexion with such an existence. The constancy of our perceptions has the most considerable effect, and yet is attended with the greatest difficulties. 'Tis a gross illusion to suppose, that our resembling perceptions are numerically the same; and 'tis this illusion, which leads us into the opinion, that these perceptions are uninterrupted, and are still existent, even when they are not present to the senses. This is the case with our popular system. And as to our philosophical one, 'tis liable to the same difficulties; and is over-and-above loaded with this absurdity, that it at once denies and establishes the vulgar supposition. Philosophers deny our resembling perceptions to be identically the same, and uninterrupted; and yet have so great a propensity to believe them such, that they arbitrarily invent a new set of perceptions, to which they attribute these qualities. I say, a new set of perceptions: For we may well suppose in general, but 'tis impossible for us distinctly to conceive, objects to be in their nature any thing but exactly the same with perceptions. What then can we look for from this confusion of groundless and extraordinary opinions but error and falshood? And how can we justify to ourselves any belief we repose in them?

[1] Sect. 5.

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This sceptical doubt, both with respect to reason and the senses, is a malady, which can never be radically cur'd, but must return upon us every moment, however we may chace it away, and sometimes may seem entirely free from it. 'Tis impossible upon any system to defend either our understanding or senses; and we but expose them farther when we endeavour to justify them in that manner. As the sceptical doubt arises naturally from a profound and intense reflection on those subjects, it always encreases, the farther we carry our reflections, whether in opposition or conformity to it. Carelessness and in-attention alone can afford us any remedy. For this reason I rely entirely upon them; and take it for granted, whatever may be the reader's opinion at this present moment, that an hour hence he will be persuaded there is both an external and internal world; and going upon that supposition, I intend to examine some general systems both ancient and modern, which have been propos'd of both, before I proceed to a more particular enquiry concerning our impressions. This will not, perhaps, in the end be found foreign to our present purpose.

SECT. III.—*Of the Antient Philosophy.*

Several moralists have recommended it as an excellent method of becoming acquainted with our own hearts, and knowing our progress in virtue, to recollect our dreams in a morning, and examine them with the same rigour, that we wou'd our most serious and most deliberate actions. Our character is the same throughout, say they, and appears best where artifice, fear, and policy have no place, and men can neither be hypocrites with themselves nor others. The generosity, or baseness of our temper, our meekness or cruelty, our courage or pusilanimity, influence the fictions of the imagination with the most unbounded liberty, and discover themselves in the most glaring colours. In like manner, I am persuaded, there might be several useful discoveries made from a criticism of the fictions of the antient philosophy, concerning *substances, and substantial forms, and accidents, and occult qualities*; which, however unreasonable and capricious, have a very intimate connexion with the principles of human nature.

'Tis confest by the most judicious philosophers, that our

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ideas of bodies are nothing but collections form'd by the mind of the ideas of the several distinct sensible qualities, of which objects are compos'd, and which we find to have a constant union with each other. But however these qualities may in themselves be entirely distinct, 'tis certain we commonly regard the compound, which they form, as ONE thing, and as continuing the SAME under very considerable alterations. The acknowledg'd composition is evidently contrary to this supposed *simplicity*, and the variation to the *identity*. It may, therefore, be worth while to consider the *causes*, which make us almost universally fall into such evident contradictions, as well as the *means* by which we endeavour to conceal them.

'Tis evident, that as the ideas of the several distinct *successive* qualities of objects are united together by a very close relation, the mind, in looking along the succession, must be carry'd from one part of it to another by an easy transition, and will no more perceive the change, than if it contemplated the same unchangeable object. This easy transition is the effect, or rather essence of relation;[1] and as the imagination readily takes one idea for another, where their influence on the mind is similar; hence it proceeds, that any such succession of related qualities is readily consider'd as one continu'd object, existing without any variation. The smooth and uninterrupted progress of the thought, being alike in both cases, readily deceives the mind, and makes us ascribe an identity to the changeable succession of connected qualities.

But when we alter our method of considering the succession, and instead of traceing it gradually thro' the successive points of time, survey at once any two distinct periods of its duration, and compare the different conditions of the successive qualities; in that case the variations, which were insensible when they arose gradually, do now appear of consequence, and seem entirely to destroy the identity.[2] By this means there arises a kind of contrariety in our method of thinking, from the different points of view, in which we survey the object, and from the nearness or remoteness of those instants of time, which we compare together. When we gradually follow an object in its successive changes, the smooth progress of the thought makes us ascribe an identity

[1] [*i.e.* 'Natural relation. See Introd. §§ 318 and 345.] [2] [Cf. page 490.]

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to the succession; because 'tis by a similar act of the mind we consider an unchangeable object. When we compare its situation after a considerable change the progress of the thought is broke; and consequently we are presented with the idea of diversity: In order to reconcile which contradictions the imagination is apt to feign something unknown and invisible, which it supposes to continue the same under all these variations; and this unintelligible something it calls a *substance, or original and first matter.*

We entertain a like notion with regard to the *simplicity* of substances, and from like causes. Suppose an object perfectly simple and indivisible to be presented, along with another object, whose *co-existent* parts are connected together by a strong relation, 'tis evident the actions of the mind, in considering these two objects, are not very different. The imagination conceives the simple object at once, with facility, by a single effort of thought, without change or variation. The connexion of parts in the compound object has almost the same effect, and so unites the object within itself, that the fancy feels not the transition in passing from one part to another. Hence the colour, taste, figure, solidity, and other qualities, combin'd in a peach or melon, are conceiv'd to form *one thing*; and that on account of their close relation, which makes them affect the thought in the same manner, as if perfectly uncompounded. But the mind rests not here. Whenever it views the object in another light, it finds that all these qualities are different, and distinguishable, and separable from each other; which view of things being destructive of its primary and more natural notions, obliges the imagination to feign an unknown something, or *original* substance and matter, as a principle of union or cohesion among these qualities, and as what may give the compound object a title to be call'd one thing, notwithstanding its diversity and composition.

The peripatetic philosophy asserts the *original* matter to be perfectly homogeneous in all bodies, and considers fire, water, earth, and air, as of the very same substance; on account of their gradual revolutions and changes into each other. At the same time it assigns to each of these species of objects a distinct *substantial form*, which it supposes to be the source of all those different qualities they possess, and to be a new foundation of simplicity and identity to each par-

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ticular species. All depends on our manner of viewing the objects. When we look along the insensible changes of bodies, we suppose all of them to be of the same substance or essence. When we consider their sensible differences, we attribute to each of them a substantial and essential difference. And in order to indulge ourselves in both these ways of considering our objects, we suppose all bodies to have at once a substance and a substantial form.

The notion of *accidents* is an unavoidable consequence of this method of thinking with regard to substances and substantial forms; nor can we forbear looking upon colours, sounds, tastes, figures, and other properties of bodies, as existences, which cannot subsist apart, but require a subject of inhesion to sustain and support them. For having never discover'd any of these sensible qualities, where, for the reasons above-mention'd, we did not likewise fancy a substance to exist; the same habit, which makes us infer a connexion betwixt cause and effect, makes us here infer a dependance of every quality on the unknown substance. The custom of imagining a dependance has the same effect as the custom of observing it wou'd have. This conceit, however, is no more reasonable than any of the foregoing. Every quality being a distinct thing from another, may be conceiv'd to exist apart, and may exist apart, not only from every other quality, but from that unintelligible chimera of a substance.[1]

But these philosophers carry their fictions still farther in their sentiments concerning *occult qualities*, and both suppose a substance supporting, which they do not understand, and an accident supported, of which they have as imperfect an idea. The whole system, therefore, is entirely incomprehensible, and yet is deriv'd from principles as natural as any of these above-explain'd.

In considering this subject we may observe a gradation of three opinions, that rise above each other, according as the persons, who form them, acquire new degrees of reason and knowledge. These opinions are that of the vulgar, that of a false philosophy, and that of the true; where we shall find upon enquiry, that the true philosophy approaches nearer to the sentiments of the vulgar, than to those of a mistaken knowledge. 'Tis natural for men, in their common and care-

[1] [See below, page 518.]

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less way of thinking, to imagine they perceive a connexion betwixt such objects as they have constantly found united together; and because custom has render'd it difficult to separate the ideas, they are apt to fancy such a separation to be in itself impossible and absurd. But philosophers, who abstract from the effects of custom, and compare the ideas of objects, immediately perceive the falshood of these vulgar sentiments, and discover that there is no known connexion among objects. Every different object appears to them entirely distinct and separate; and they perceive, that 'tis not from a view of the nature and qualities of objects we infer one from another, but only when in several instances we observe them to have been constantly conjoin'd. But these philosophers, instead of drawing a just inference from this observation, and concluding, that we have no idea of power or agency, separate from the mind,[1] and belonging to causes; I say, instead of drawing this conclusion, they frequently search for the qualities, in which this agency consists, and are displeased with every system, which their reason suggests to them, in order to explain it. They have sufficient force of genius to free them from the vulgar error, that there is a natural and perceivable connexion betwixt the several sensible qualities and actions of matter; but not sufficient to keep them from ever seeking for this connexion in matter, or causes. Had they fallen upon the just conclusion, they wou'd have return'd back to the situation of the vulgar, and wou'd have regarded all these disquisitions with indolence and indifference. At present they seem to be in a very lamentable condition, and such as the poets have given us but a faint notion of in their descriptions of the punishment of *Sisyphus* and *Tantalus*. For what can be imagin'd more tormenting, than to seek with eagerness, what for ever flies us; and seek for it in a place, where 'tis impossible it can ever exist?

But as nature seems to have observ'd a kind of justice and compensation in every thing, she has not neglected philosophers more than the rest of the creation; but has reserv'd them a consolation amid all their disappointments and afflictions. This consolation principally consists in their inven-

[1] [That we have no idea of power as *belonging to the mind* Hume argues at length in Part III. § 14. See the passage beginning 'Some have asserted'; about five pages from the beginning of that section.]

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tion of the words *faculty* and *occult quality*. For it being usual, after the frequent use of terms, which are really significant and intelligible, to omit the idea, which we wou'd express by them, and to preserve only the custom, by which we recal the idea at pleasure; so it naturally happens, that after the frequent use of terms, which are wholly insignificant and unintelligible, we fancy them to be on the same footing with the precedent, and to have a secret meaning, which we might discover by reflection. The resemblance of their appearance deceives the mind, as is usual, and makes us imagine a thorough resemblance and conformity. By this means these philosophers set themselves at ease, and arrive at last, by an illusion, at the same indifference, which the people attain by their stupidity, and true philosophers by their moderate scepticism. They need only say, that any phænomenon, which puzzles them, arises from a faculty or an occult quality, and there is an end of all dispute and enquiry upon the matter.

But among all the instances, wherein the Peripatetics have shewn they were guided by every trivial propensity of the imagination, no one is more remarkable than their *sympathies, antipathies, and horrors of a vacuum*. There is a very remarkable inclination in human nature, to bestow on external objects the same emotions, which it observes in itself; and to find every where those ideas, which are most present to it. This inclination, 'tis true, is suppress'd by a little reflection, and only takes place in children, poets, and the antient philosophers. It appears in children, by their desire of beating the stones, which hurt them: In poets, by their readiness to personify every thing: And in the antient philosophers, by these fictions of sympathy and antipathy. We must pardon children, because of their age; poets, because they profess to follow implicitly the suggestions of their fancy: But what excuse shall we find to justify our philosophers in so signal a weakness?

SECT. IV.—*Of the Modern Philosophy.*

But here it may be objected, that the imagination, according to my own confession, being the ultimate judge of all systems of philosophy, I am unjust in blaming the antient philosophers for making use of that faculty, and allowing

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themselves to be entirely guided by it in their reasonings. In order to justify myself, I must distinguish in the imagination betwixt the principles which are permanent, irresistible, and universal; such as the customary transition from causes to effects, and from effects to causes: And the principles, which are changeable, weak, and irregular; such as those I have just now taken notice of. The former are the foundation of all our thoughts and actions, so that upon their removal human nature must immediately perish and go to ruin. The latter are neither unavoidable to mankind, nor necessary, or so much as useful in the conduct of life; but on the contrary are observ'd only to take place in weak minds, and being opposite to the other principles of custom and reasoning, may easily be subverted by a due contrast and opposition. For this reason the former are received by philosophy, and the latter rejected. One who concludes somebody to be near him, when he hears an articulate voice in the dark, reasons justly and naturally; tho' that conclusion be deriv'd from nothing but custom, which infixes and inlivens the idea of a human creature, on account of his usual conjunction with the present impression. But one, who is tormented he knows not why, with the apprehension of spectres in the dark, may, perhaps, be said to reason, and to reason naturally too: But then it must be in the same sense, that a malady is said to be natural; as arising from natural causes, tho' it be contrary to health, the most agreeable and most natural situation of man.

The opinions of the antient philosophers, their fictions of substance and accident, and their reasonings concerning substantial forms and occult qualities, are like the spectres in the dark, and are deriv'd from principles, which, however common, are neither universal nor unavoidable in human nature. The *modern philosophy* pretends to be entirely free from this defect, and to arise only from the solid, permanent, and consistent principles of the imagination. Upon what grounds this pretension is founded must now be the subject of our enquiry.

The fundamental principle of that philosophy is the opinion concerning colours, sounds, tastes, smells, heat and cold; which it asserts to be nothing but impressions in the mind, deriv'd from the operation of external objects, and without any resemblance to the qualities of the objects. Upon ex-

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amination, I find only one of the reasons commonly produc'd for this opinion to be satisfactory, *viz.* that deriv'd from the variations of those impressions, even while the external object, to all appearance, continues the same. These variations depend upon several circumstances. Upon the different situations of our health: A man in a malady feels a disagreeable taste in meats, which before pleas'd him the most. Upon the different complexions and constitutions of men: That seems bitter to one, which is sweet to another. Upon the difference of their external situation and position: Colours reflected from the clouds change according to the distance of the clouds, and according to the angle they make with the eye and luminous body. Fire also communicates the sensation of pleasure at one distance, and that of pain at another. Instances of this kind are very numerous and frequent.

The conclusion drawn from them, is likewise as satisfactory as can possibly be imagin'd. 'Tis certain, that when different impressions of the same sense arise from any object, every one of these impressions has not a resembling quality existent in the object. For as the same object cannot, at the same time, be endow'd with different qualities of the same sense, and as the same quality cannot resemble impressions entirely different; it evidently follows, that many of our impressions have no external model or archetype. Now from like effects we presume like causes. Many of the impressions of colour, sound, &c. are confest to be nothing but internal existences, and to arise from causes, which no ways resemble them. These impressions are in appearance nothing different from the other impressions of colour, sound, &c. We conclude, therefore, that they are, all of them, deriv'd from a like origin.

This principle being once admitted, all the other doctrines of that philosophy seem to follow by an easy consequence. For upon the removal of sounds, colours, heat, cold, and other sensible qualities, from the rank of continu'd independent existences, we are reduc'd merely to what are called primary qualities, as the only *real* ones, of which we have any adequate notion. These primary qualities are extension and solidity, with their different mixtures and modifications; figure, motion, gravity, and cohesion. The generation, encrease, decay, and corruption of animals and vegetables,

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are nothing but changes of figure and motion; as also the operations of all bodies on each other; of fire, of light, water, air, earth, and of all the elements and powers of nature. One figure and motion produces another figure and motion; nor does there remain in the material universe any other principle, either active or passive, of which we can form the most distant idea.

I believe many objections might be made to this system: But at present I shall confine myself to one, which is in my opinion very decisive. I assert, that instead of explaining the operations of external objects by its means, we utterly annihilate all these objects, and reduce ourselves to the opinions of the most extravagant scepticism concerning them. If colours, sounds, tastes, and smells be merely perceptions, nothing we can conceive is possest of a real, continu'd, and independent existence; not even motion, extension and solidity, which are the primary qualities chiefly insisted on.[1]

To begin with the examination of motion; 'tis evident this is a quality altogether inconceivable alone, and without a reference to some other object. The idea of motion necessarily supposes that of a body moving. Now what is our idea of the moving body, without which motion is incomprehensible? It must resolve itself into the idea of extension or of solidity; and consequently the reality of motion depends upon that of these other qualities.

This opinion, which is universally acknowledg'd concerning motion, I have prov'd to be true with regard to extension; and have shewn that 'tis impossible to conceive extension, but as compos'd of parts, endow'd with colour or solidity.[2] The idea of extension is a compound idea; but as it is not compounded of an infinite number of parts or inferior ideas, it must at last resolve itself into such as are perfectly simple and indivisible. These simple and indivisible parts, not being ideas of extension, must be non-entities, unless conceiv'd as colour'd or solid. Colour is excluded from any real existence. The reality, therefore, of our idea of extension depends upon the reality of that of solidity, nor can the former be just while the latter is chimerical. Let us, then, lend our attention to the examination of the idea of solidity.

The idea of solidity is that of two objects, which being

[1] [Introd. § 229 and ff.]

[2] [Part II. § 3, *sub fin.*]

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impell'd by the utmost force, cannot penetrate each other; but still maintain a separate and distinct existence. Solidity, therefore, is perfectly incomprehensible alone, and without the conception of some bodies, which are solid, and maintain this separate and distinct existence. Now what idea have we of these bodies? The ideas of colours, sounds, and other secondary qualities are excluded. The idea of motion depends on that of extension, and the idea of extension on that of solidity. 'Tis impossible, therefore, that the idea of solidity can depend on either of them: For that wou'd be to run in a circle, and make one idea depend on another, while at the same time the latter depends on the former. Our modern philosophy, therefore, leaves us no just nor satisfactory idea of solidity; nor consequently of matter.

This argument will appear entirely conclusive to every one that comprehends it; but because it may seem abstruse and intricate to the generality of readers, I hope to be excus'd, if I endeavour to render it more obvious by some variation of the expression. In order to form an idea of solidity, we must conceive two bodies pressing on each other without any penetration; and 'tis impossible to arrive at this idea, when we confine ourselves to one object, much more without conceiving any. Two non-entities cannot exclude each other from their places; because they never possess any place, nor can be endow'd with any quality. Now I ask, what idea do we form of these bodies or objects, to which we suppose solidity to belong? To say, that we conceive them merely as solid, is to run on *in infinitum*. To affirm, that we paint them out to ourselves as extended, either resolves all into a false idea, or returns in a circle. Extension must necessarily be consider'd either as colour'd, which is a false idea;[1] or as solid, which brings us back to the first question. We may make the same observation concerning mobility and figure; and upon the whole must conclude, that after the exclusion of colours, sounds, heat and cold from the rank of external existences, there remains nothing, which can afford us a just and constituent idea of body.

Add to this, that, properly speaking, solidity or impene-

[1] [*i.e.* according to the 'Modern Philosophy;' not according to Hume himself.]

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trability is nothing, but an impossibility of annihilation, as[1] has been already observ'd: For which reason 'tis the more necessary for us to form some distinct idea of that object, whose annihilation we suppose impossible. An impossibility of being annihilated cannot exist, and can never be conceived to exist, by itself; but necessarily requires some object or real existence, to which it may belong. Now the difficulty still remains, how to form an idea of this object or existence, without having recourse to the secondary and sensible qualities.

Nor must we omit on this occasion our accustom'd method of examining ideas by considering those impressions, from which they are deriv'd. The impressions, which enter by the sight and hearing, the smell and taste, are affirm'd by modern philosophy to be without any resembling objects; and consequently the idea of solidity, which is suppos'd to be real, can never be deriv'd from any of these senses. There remains, therefore, the feeling as the only sense, that can convey the impression, which is original to the idea of solidity; and indeed we naturally imagine, that we feel the solidity of bodies, and need but touch any object in order to perceive this quality. But this method of thinking is more popular than philosophical; as will appear from the following reflections.

First, 'Tis easy to observe, that tho' bodies are felt by means of their solidity, yet the feeling is a quite different thing from the solidity; and that they have not the least resemblance to each other. A man, who has the palsey in one hand, has as perfect an idea of impenetrability, when he observes that hand to be supported by the table, as when he feels the same table with the other hand. An object, that presses upon any of our members, meets with resistance; and that resistance, by the motion it gives to the nerves and animal spirits, conveys a certain sensation to the mind; but it does not follow, that the sensation, motion, and resistance are any ways resembling.

Secondly, The impressions of touch are simple impressions, except when consider'd with regard to their extension; which makes nothing to the present purpose: And from this simplicity I infer, that they neither represent solidity, nor any real object. For let us put two cases, *viz.* that of a man,

[1] Part II. Sect. 4.

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who presses a stone, or any solid body, with his hand, and that of two stones, which press each other; 'twill readily be allow'd, that these two cases are not in every respect alike, but that in the former there is conjoin'd with the solidity, a feeling or sensation, of which there is no appearance in the latter. In order, therefore, to make these two cases alike, 'tis necessary to remove some part of the impression, which the man feels by his hand, or organ of sensation; and that being impossible in a simple impression, obliges us to remove the whole, and proves that this whole impression has no archetype or model in external objects. To which we may add, that solidity necessarily supposes two bodies, along with contiguity and impulse; which being a compound object, can never be represented by a simple impression. Not to mention, that tho' solidity continues always invariably the same, the impressions of touch change every moment upon us; which is a clear proof that the latter are not representations of the former.[1]

Thus there is a direct and total opposition betwixt our reason and our senses; or more properly speaking, betwixt those conclusions we form from cause and effect, and those that persuade us of the continu'd and independent existence of body. When we reason from cause and effect, we conclude, that neither colour, sound, taste, nor smell have a continu'd and independent existence. When we exclude these sensible qualities there remains nothing in the universe, which has such an existence.

SECT. V.—*Of the Immateriality of the Soul.*

Having found such contradictions and difficulties in every system concerning external objects, and in the idea of matter, which we fancy so clear and determinate, we shall naturally expect still greater difficulties and contradictions in every hypothesis concerning our internal perceptions, and the nature of the mind, which we are apt to imagine so much more obscure, and uncertain. But in this we shou'd deceive ourselves. The intellectual world, tho' involv'd in infinite obscurities, is not perplex'd with any such contradictions, as those we have discover'd in the natural. What is known

[1] [Cf. pp. 483 and 484, and Introd. § 247.]

concerning it, agrees with itself; and what is unknown, we must be contented to leave so.

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'Tis true, wou'd we hearken to certain philosophers, they promise to diminish our ignorance; but I am afraid 'tis at the hazard of running us into contradictions, from which the subject is of itself exempted. These philosophers are the curious reasoners concerning the material or immaterial substances, in which they suppose our perceptions to inhere. In order to put a stop to these endless cavils on both sides, I know no better method, than to ask these philosophers in a few words, *What they mean by substance and inhesion*? And after they have answer'd this question, 'twill then be reasonable, and not till then, to enter seriously into the dispute.

This question we have found impossible to be answer'd with regard to matter and body: But besides that in the case of the mind, it labours under all the same difficulties, 'tis burthen'd with some additional ones, which are peculiar to that subject. As every idea is deriv'd from a precedent impression, had we any idea of the substance of our minds, we must also have an impression of it; which is very difficult, if not impossible, to be conceiv'd. For how can an impression represent a substance, otherwise than by resembling it? And how can an impression resemble a substance, since, according to this philosophy, it is not a substance, and has none of the peculiar qualities or characteristics of a substance?

But leaving the question *of what may or may not be*, for that other *what actually is*, I desire those philosophers, who pretend that we have an idea of the substance of our minds, to point out the impression that produces it, and tell distinctly after what manner that impression operates, and from what object it is deriv'd. Is it an impression of sensation or of reflection? Is it pleasant, or painful, or indifferent?[1] Does it attend us at all times, or does it only return at intervals? If at intervals, at what times principally does it return, and by what causes is it produced?

If instead of answering these questions, any one shou'd evade the difficulty, by saying, that the definition of a substance is *something which may exist by itself*; and that this definition ought to satisfy us: Shou'd this be said, I shou'd observe, that this definition agrees to every thing, that can

[1] [Introd. § 205.]

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possibly be conceiv'd; and never will serve to distinguish substance from accident, or the soul from its perceptions. For thus I reason. Whatever is clearly conceiv'd may exist; and whatever is clearly conceiv'd, after any manner, may exist after the same manner. This is one principle, which has been already acknowledg'd. Again, every thing, which is different, is distinguishable, and every thing which is distinguishable, is separable by the imagination. This is another principle. My conclusion from both is, that since all our perceptions are different from each other, and from every thing else in the universe, they are also distinct and separable, and may be consider'd as separately existent, and may exist separately, and have no need of any thing else to support their existence.[1] They are, therefore, substances, as far as this definition explains a substance.

Thus neither by considering the first origin of ideas, nor by means of a definition are we able to arrive at any satisfactory notion of substance; which seems to me a sufficient reason for abandoning utterly that dispute concerning the materiality and immateriality of the soul, and makes me absolutely condemn even the question itself. We have no perfect idea of any thing but of a perception. A substance is entirely different from a perception. We have, therefore, no idea of a substance. Inhesion in something is suppos'd to be requisite to support the existence of our perceptions. Nothing appears requisite to support the existence of a perception. We have, therefore, no idea of inhesion. What possibility then of answering that question, *Whether perceptions inhere in a material or immaterial substance*, when we do not so much as understand the meaning of the question?[2]

There is one argument commonly employ'd for the immateriality of the soul, which seems to me remarkable. Whatever is extended consists of parts; and whatever consists of parts is divisible, if not in reality, at least in the imagination. But 'tis impossible any thing divisible can be *conjoin'd* to a thought or perception, which is a being altogether inseparable and indivisible. For supposing such a conjunction, wou'd the indivisible thought exist on the left or on the right hand of this extended divisible body? On the surface or in the middle? On the back- or fore-side of

[1] [Introd. § 306; cf. page 508.]

[2] [Introd. § 339.]

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it? If it be conjoin'd with the extension, it must exist somewhere within its dimensions. If it exist within its dimensions, it must either exist in one particular part; and then that particular part is indivisible, and the perception is conjoin'd only with it, not with the extension: Or if the thought exists in every part, it must also be extended, and separable, and divisible, as well as the body; which is utterly absurd and contradictory. For can any one conceive a passion of a yard in length, a foot in breadth, and an inch in thickness? Thought, therefore, and extension are qualities wholly incompatible, and never can incorporate together into one subject.

This argument affects not the question concerning the *substance* of the soul, but only that concerning its *local conjunction* with matter; and therefore it may not be improper to consider in general what objects are, or are not susceptible of a local conjunction. This is a curious question, and may lead us to some discoveries of considerable moment.

The first notion of space and extension is deriv'd solely from the senses of sight and feeling; nor is there any thing, but what is colour'd or tangible, that has parts dispos'd after such a manner, as to convey that idea.[1] When we diminish or encrease a relish, 'tis not after the same manner that we diminish or encrease any visible object; and when several sounds strike our hearing at once, custom and reflection alone make us form an idea of the degrees of the distance and contiguity of those bodies, from which they are deriv'd. Whatever marks the place of its existence either must be extended, or must be a mathematical point, without parts or composition. What is extended must have a particular figure, as square, round, triangular; none of which will agree to a desire, or indeed to any impression or idea, except of these two senses above-mention'd. Neither ought a desire, tho' indivisible, to be consider'd as a mathematical point. For in that case 'twou'd be possible, by the addition of others, to make two, three, four desires, and these dispos'd and situated in such a manner, as to have a determinate length, breadth and thickness; which is evidently absurd.

'Twill not be surprizing after this, if I deliver a maxim, which is condemn'd by several metaphysicians, and is esteem'd contrary to the most certain principles of human

[1] [Introd. § 233.]

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reason. This maxim is *that an object may exist, and yet be no where*: and I assert, that this is not only possible, but that the greatest part of beings do and must exist after this manner.[1] An object may be said to be no where, when its parts are not so situated with respect to each other, as to form any figure or quantity; nor the whole with respect to other bodies so as to answer to our notions of contiguity or distance. Now this is evidently the case with all our perceptions and objects, except those of the sight and feeling. A moral reflection cannot be plac'd on the right or on the left hand of a passion, nor can a smell or sound be either of a circular or a square figure. These objects and perceptions, so far from requiring any particular place, are absolutely incompatible with it, and even the imagination cannot attribute it to them. And as to the absurdity of supposing them to be no where, we may consider, that if the passions and sentiments appear to the perception to have any particular place, the idea of extension might be deriv'd from them, as well as from the sight and touch; contrary to what we have already esta-blish'd. If they *appear* not to have any particular place, they may possibly *exist* in the same manner; since whatever we conceive is possible.

'Twill not now be necessary to prove, that those perceptions, which are simple, and exist no where, are incapable of any conjunction in place with matter or body, which is extended and divisible; since 'tis impossible to found a relation[2] but on some common quality. It may be better worth our while to remark, that this question of the local conjunction of objects does not only occur in metaphysical disputes concerning the nature of the soul, but that even in common life we have every moment occasion to examine it. Thus supposing we consider a fig at one end of the table, and an olive at the other, 'tis evident, that in forming the complex ideas of these substances, one of the most obvious is that of their different relishes; and 'tis as evident, that we incorpo-rate and conjoin these qualities with such as are colour'd and tangible. The bitter taste of the one, and sweet of the other are suppos'd to lie in the very visible body, and to be sepa-rated from each other by the whole length of the table. This is so notable and so natural an illusion, that it may be proper to consider the principles, from which it is deriv'd.

[1] [See Locke, Essay, Book II. ch. 13, § 25.]

[2] Part I. Sect. 5.

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Tho' an extended object be incapable of a conjunction in place with another, that exists without any place or extension, yet are they susceptible of many other relations. Thus the taste and smell of any fruit are inseparable from its other qualities of colour and tangibility; and which-ever of them be the cause or effect, 'tis certain they are always co-existent.[1] Nor are they only co-existent in general, but also co-temporary in their appearance in the mind; and 'tis upon the application of the extended body to our senses we perceive its particular taste and smell. These relations, then, of *causation, and contiguity in the time of their appearance*, betwixt the extended object and the quality, which exists without any particular place, must have such an effect on the mind, that upon the appearance of one it will immediately turn its thought to the conception of the other. Nor is this all. We not only turn our thought from one to the other upon account of their relation, but likewise endeavour to give them a new relation, *viz.* that of *a conjunction in place*, that we may render the transition more easy and natural. For 'tis a quality, which I shall often have occasion to remark in human nature, and shall explain more fully in its proper place, that when objects are united by any relation, we have a strong propensity to add some new relation to them, in order to compleat the union. In our arrangement of bodies we never fail to place such as are resembling, in contiguity to each other, or at least in correspondent points of view: Why? but because we feel a satisfaction in joining the relation of contiguity to that of resemblance, or the resemblance of situation to that of qualities. The effects of this propensity have been[2] already observ'd in that resemblance, which we so readily suppose betwixt particular impressions and their external causes. But we shall not find a more evident effect of it, than in the present instance, where from the relations of causation and contiguity in time betwixt two objects, we feign likewise that of a conjunction in place, in order to strengthen the connexion.[3]

But whatever confus'd notions we may form of an union in place betwixt an extended body, as a fig, and its particular taste, 'tis certain that upon reflection we must observe in this union something altogether unintelligible and contra-

[1] [Introd. § 241.]
[2] Sect. 2, towards the end.
[3] [Introd. § 340.]

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dictory. For shou'd we ask ourselves one obvious question, *viz.* if the taste, which we conceive to be contain'd in the circumference of the body, is in every part of it or in one only, we must quickly find ourselves at a loss, and perceive the impossibility of ever giving a satisfactory answer. We cannot reply, that 'tis only in one part: For experience convinces us, that every part has the same relish. We can as little reply, that it exists in every part: For then we must suppose it figur'd and extended; which is absurd and incomprehensible. Here then we are influenc'd by two principles directly contrary to each other, *viz.* that *inclination* of our fancy by which we are determin'd to incorporate the taste with the extended object, and our *reason*, which shows us the impossibility of such an union. Being divided betwixt these opposite principles, we renounce neither one nor the other, but involve the subject in such confusion and obscurity, that we no longer perceive the opposition. We suppose, that the taste exists within the circumference of the body, but in such a manner, that it fills the whole without extension, and exists entire in every part without separation. In short, we use in our most familiar way of thinking, that scholastic principle, which, when crudely propos'd, appears so shocking, of *totum in toto & totum in qualibet parte:* Which is much the same, as if we shou'd say, that a thing is in a certain place, and yet is not there.

All this absurdity proceeds from our endeavouring to bestow a place on what is utterly incapable of it; and that endeavour again arises from our inclination to compleat an union, which is founded on causation, and a contiguity of time, by attributing to the objects a conjunction in place. But if ever reason be of sufficient force to overcome prejudice, 'tis certain, that in the present case it must prevail. For we have only this choice left, either to suppose that some beings exist without any place; or that they are figur'd and extended; or that when they are incorporated with extended objects, the whole is in the whole, and the whole in every part. The absurdity of the two last suppositions proves sufficiently the veracity of the first. Nor is there any fourth opinion. For as to the supposition of their existence in the manner of mathematical points, it resolves itself into the second opinion, and supposes, that several passions may be plac'd in a circular figure, and that a certain number of

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smells, conjoin'd with a certain number of sounds, may make a body of twelve cubic inches; which appears ridiculous upon the bare mentioning of it.

But tho' in this view of things we cannot refuse to condemn the materialists, who conjoin all thought with extension; yet a little reflection will show us equal reason for blaming their antagonists, who conjoin all thought with a simple and indivisible substance. The most vulgar philosophy informs us, that no external object can make itself known to the mind immediately, and without the interposition of an image or perception. That table, which just now appears to me, is only a perception, and all its qualities are qualities of a perception. Now the most obvious of all its qualities is extension. The perception consists of parts. These parts are so situated, as to afford us the notion of distance and contiguity; of length, breadth, and thickness. The termination of these three dimensions is what we call figure.[1] This figure is moveable, separable, and divisible. Mobility, and separability are the distinguishing properties of extended objects. And to cut short all disputes, the very idea of extension is copy'd from nothing but an impression, and consequently must perfectly agree to it. To say the idea of extension agrees to any thing, is to say it is extended.[2]

The free-thinker may now triumph in his turn; and having found there are impressions and ideas really extended, may ask his antagonists, how they can incorporate a simple and indivisible subject with an extended perception? All the arguments of Theologians may here be retorted upon them. Is the indivisible subject, or immaterial substance, if you will, on the left or on the right hand of the perception? Is it in this particular part, or in that other? Is it in every part without being extended? Or is it entire in any one part without deserting the rest? 'Tis impossible to give any answer to these questions, but what will both be absurd in itself, and will account for the union of our indivisible perceptions with an extended substance.

This gives me an occasion to take a-new into consideration the question concerning the substance of the soul; and tho' I have condemn'd that question as utterly unintelligible, yet I cannot forbear proposing some farther reflections concerning it. I assert, that the doctrine of the immate-

[1] [Above, page 349.] [2] [Introd. § 235 and ff.]

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riality, simplicity, and indivisibility of a thinking substance is a true atheism, and will serve to justify all those sentiments, for which *Spinoza* is so universally infamous. From this topic, I hope at least to reap one advantage, that my adversaries will not have any pretext to render the present doctrine odious by their declamations, when they see that they can be so easily retorted on them.[1]

The fundamental principle of the atheism of *Spinoza* is the doctrine of the simplicity of the universe, and the unity of that substance, in which he supposes both thought and matter to inhere. There is only one substance, says he, in the world; and that substance is perfectly simple and indivisible, and exists every where, without any local presence. Whatever we discover externally by sensation; whatever we feel internally by reflection; all these are nothing but modifications of that one, simple, and necessarily existent being, and are not possest of any separate or distinct existence. Every passion of the soul; every configuration of matter, however different and various, inhere in the same substance, and preserve in themselves their characters of distinction, without communicating them to that subject, in which they inhere. The same *substratum*, if I may so speak, supports the most different modifications, without any difference in itself; and varies them, without any variation. Neither time, nor place, nor all the diversity of nature are able to produce any composition or change in its perfect simplicity and identity.

I believe this brief exposition of the principles of that famous atheist will be sufficient for the present purpose, and that without entering farther into these gloomy and obscure regions, I shall be able to shew, that this hideous hypothesis is almost the same with that of the immateriality of the soul, which has become so popular. To make this evident, let us [2] remember, that as every idea is deriv'd from a preceding perception, 'tis impossible our idea of a perception, and that of an object or external existence can ever represent what are specifically different from each other. Whatever difference we may suppose betwixt them, 'tis still incomprehensible to us; and we are oblig'd either to conceive an external object merely as a relation without a relative, or to make it the very same with a perception or impression.

[1] [Introd. § 340.]

[2] Part II. Sect. 6.

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The consequence I shall draw from this may, at first sight, appear a mere sophism; but upon the least examination will be found solid and satisfactory. I say then, that since we may suppose, but never can conceive a specific difference betwixt an object and impression; any conclusion we form concerning the connexion and repugnance of impressions, will not be known certainly to be applicable to objects; but that on the other hand, whatever conclusions of this kind we form concerning objects, will most certainly be applicable to impressions. The reason is not difficult. As an object is suppos'd to be different from an impression, we cannot be sure, that the circumstance, upon which we found our reasoning, is common to both, supposing we form the reasoning upon the impression. 'Tis still possible, that the object may differ from it in that particular. But when we first form our reasoning concerning the object, 'tis beyond doubt, that the same reasoning must extend to the impression: And that because the quality of the object, upon which the argument is founded, must at least be conceiv'd by the mind; and cou'd not be conceiv'd, unless it were common to an impression; since we have no idea but what is deriv'd from that origin. Thus we may establish it as a certain maxim, that we can never, by any principle, but by an irregular kind[1] of reasoning from experience, discover a connexion or repugnance betwixt objects, which extends not to impressions; tho' the inverse proposition may not be equally true, that all the discoverable relations of impressions are common to objects.

To apply this to the present case; there are two different systems of being presented, to which I suppose myself under a necessity of assigning some substance, or ground of inhesion. I observe first the universe of objects or of body: The sun, moon and stars; the earth, seas, plants, animals, men, ships, houses, and other productions either of art or nature. Here *Spinoza* appears, and tells me, that these are only modifications; and that the subject, in which they inhere, is simple, incompounded, and indivisible. After this I consider the other system of beings, *viz.* the universe of thought, or my impressions and ideas. There I observe another sun, moon and stars; an earth, and seas, cover'd and inhabited by plants and animals; towns, houses, moun-

[1] Such as that of Sect. 2, from the coherence of our perceptions.

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tains, rivers; and in short every thing I can discover or conceive in the first system. Upon my enquiring concerning these, Theologians present themselves, and tell me, that these also are modifications, and modifications of one simple, uncompounded, and indivisible substance. Immediately upon which I am deafen'd with the noise of a hundred voices, that treat the first hypothesis with detestation and scorn, and the second with applause and veneration. I turn my attention to these hypotheses to see what may be the reason of so great a partiality; and find that they have the same fault of being unintelligible, and that as far as we can understand them, they are so much alike, that 'tis impossible to discover any absurdity in one, which is not common to both of them. We have no idea of any quality in an object, which does not agree to, and may not represent a quality in an impression; and that because all our ideas are deriv'd from our impressions. We can never, therefore, find any repugnance betwixt an extended object as a modification, and a simple uncompounded essence, as its substance, unless that repugnance takes place equally betwixt the perception or impression of that extended object, and the same uncompounded essence. Every idea of a quality in an object passes thro' an impression; and therefore every *perceivable* relation, whether of connexion or repugnance, must be common both to objects and impressions.

But tho' this argument, consider'd in general, seems evident beyond all doubt and contradiction, yet to make it more clear and sensible, let us survey it in detail; and see whether all the absurdities, which have been found in the system of *Spinoza*, may not likewise be discover'd in that of Theologians.[1]

First, It has been said against *Spinoza*, according to the scholastic way of talking, rather than thinking, that a mode, not being any distinct or separate existence, must be the very same with its substance, and consequently the extension of the universe, must be in a manner identify'd with that simple, uncompounded essence, in which the universe is suppos'd to inhere. But this, it may be pretended, is utterly impossible and inconceivable unless the indivisible substance expand itself, so as to correspond to the extension, or the extension contract itself, so as to answer to the indivisible substance.

[1] See *Bayle's* dictionary, article of *Spinoza*.

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This argument seems just, as far as we can understand it; and 'tis plain nothing is requir'd, but a change in the terms, to apply the same argument to our extended perceptions, and the simple essence of the soul; the ideas of objects and perceptions being in every respect the same, only attended with the supposition of a difference, that is unknown and incomprehensible.

Secondly, It has been said, that we have no idea of substance, which is not applicable to matter; nor any idea of a distinct substance, which is not applicable to every distinct portion of matter. Matter, therefore, is not a mode but a substance, and each part of matter is not a distinct mode, but a distinct substance. I have already prov'd, that we have no perfect idea of substance; but that taking it for *something, that can exist by itself*, 'tis evident every perception is a substance, and every distinct part of a perception a distinct substance: And consequently the one hypothesis labours under the same difficulties in this respect with the other.

Thirdly, It has been objected to the system of one simple substance in the universe, that this substance being the support or *substratum* of every thing, must at the very same instant be modify'd into forms, which are contrary and incompatible. The round and square figures are incompatible in the same substance at the same time. How then is it possible, that the same substance can at once be modify'd into that square table, and into this round one? I ask the same question concerning the impressions of these tables; and find that the answer is no more satisfactory in one case than in the other.

It appears, then, that to whatever side we turn, the same difficulties follow us, and that we cannot advance one step towards the establishing the simplicity and immateriality of the soul, without preparing the way for a dangerous and irrecoverable atheism. 'Tis the same case, if instead of calling thought a modification of the soul, we shou'd give it the more antient, and yet more modish name of an *action*. By an action we mean much the same thing, as what is commonly call'd an abstract mode; that is, something, which, properly speaking, is neither distinguishable, nor separable from its substance, and is only conceiv'd by a distinction of reason, or an abstraction. But nothing is gain'd by this

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change of the term of modification, for that of action; nor do we free ourselves from one single difficulty by its means; as will appear from the two following reflections.

First, I observe, that the word, action, according to this explication of it, can never justly be apply'd to any perception, as deriv'd from a mind or thinking substance. Our perceptions are all really different, and separable, and distinguishable from each other, and from everything else, which we can imagine; and therefore 'tis impossible to conceive, how they can be the action or abstract mode of any substance. The instance of motion, which is commonly made use of to shew after what manner perception depends, as an action, upon its substance, rather confounds than instructs us.[1] Motion to all appearance induces no real nor essential change on the body, but only varies its relation to other objects. But betwixt a person in the morning walking in a garden with company, agreeable to him; and a person in the afternoon inclos'd in a dungeon, and full of terror, despair, and resentment, there seems to be a radical difference, and of quite another kind, than what is produc'd on a body by the change of its situation. As we conclude from the distinction and separability of their ideas, that external objects have a separate existence from each other; so when we make these ideas themselves our objects, we must draw the same conclusion concerning *them*, according to the precedent reasoning. At least it must be confest, that having no idea of the substance of the soul, 'tis impossible for us to tell how it can admit of such differences, and even contrarieties of perception without any fundamental change; and consequently can never tell in what sense perceptions are actions of that substance. The use, therefore, of the word, *action*, unaccompany'd with any meaning, instead of that of modification, makes no addition to our knowledge, nor is of any advantage to the doctrine of the immateriality of the soul.

I add in the second place, that if it brings any advantage to that cause, it must bring an equal to the cause of atheism. For do our Theologians pretend to make a monopoly of the word, *action*, and may not the atheists likewise take possession of it, and affirm that plants, animals, men, &c. are nothing but particular actions of one simple universal sub-

[1] [Cf. Locke, Essay, Book II. ch. 1, § 10.]

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stance, which exerts itself from a blind and absolute necessity? This you'll say is utterly absurd. I own 'tis unintelligible; but at the same time assert, according to the principles above-explain'd, that 'tis impossible to discover any absurdity in the supposition, that all the various objects in nature are actions of one simple substance, which absurdity will not be applicable to a like supposition concerning impressions and ideas.

From these hypotheses concerning the *substance* and *local conjunction* of our perceptions, we may pass to another, which is more intelligible than the former, and more important than the latter, *viz.* concerning the *cause* of our perceptions. Matter and motion, 'tis commonly said in the schools, however vary'd, are still matter and motion, and produce only a difference in the position and situation of objects. Divide a body as often as you please, 'tis still body. Place it in any figure, nothing ever results but figure, or the relation of parts. Move it in any manner, you still find motion or a change of relation. 'Tis absurd to imagine, that motion in a circle, for instance, shou'd be nothing but merely motion in a circle; while motion in another direction, as in an ellipse, shou'd also be a passion or moral reflection: That the shocking of two globular particles shou'd become a sensation of pain, and that the meeting of two triangular ones shou'd afford a pleasure. Now as these different shocks, and variations, and mixtures are the only changes, of which matter is susceptible, and as these never afford us any idea of thought or perception, 'tis concluded to be impossible, that thought can ever be caus'd by matter.

Few have been able to withstand the seeming evidence of this argument; and yet nothing in the world is more easy than to refute it. We need only reflect on what has been prov'd at large, that we are never sensible of any connexion betwixt causes and effects, and that 'tis only by our experience of their constant conjunction, we can arrive at any knowledge of this relation. Now as all objects, which are not contrary, are susceptible of a constant conjunction, and as no real objects are contrary;[1] I have inferr'd from these principles, that to consider the matter *a priori*, any thing may produce any thing, and that we shall never discover a

[1] Part III. Sect. 15. [Cf. Part I. Sect. 5; on the sixth sort of 'Philosophical relation.'—Ed.]

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reason, why any object may or may not be the cause of any other, however great, or however little the resemblance may be betwixt them. This evidently destroys the precedent reasoning concerning the cause of thought or perception. For tho' there appear no manner of connexion betwixt motion or thought, the case is the same with all other causes and effects. Place one body of a pound weight on one end of a lever, and another body of the same weight on another end; you will never find in these bodies any principle of motion dependent on their distances from the center, more than of thought and perception. If you pretend, therefore, to prove *a priori*, that such a position of bodies can never cause thought; because turn it which way you will, 'tis nothing but a position of bodies; you must by the same course of reasoning conclude, that it can never produce motion; since there is no more apparent connexion in the one case than in the other. But as this latter conclusion is contrary to evident experience, and as 'tis possible we may have a like experience in the operations of the mind, and may perceive a constant conjunction of thought and motion; you reason too hastily, when from the mere consideration of the ideas, you conclude that 'tis impossible motion can ever produce thought, or a different position of parts give rise to a different passion or reflection. Nay 'tis not only possible we may have such an experience, but 'tis certain we have it; since every one may perceive, that the different dispositions of his body change his thoughts and sentiments. And shou'd it be said, that this depends on the union of soul and body; I wou'd answer, that we must separate the question concerning the substance of the mind from that concerning the cause of its thought; and that confining ourselves to the latter question we find by the comparing their ideas, that thought and motion are different from each other, and by experience, that they are constantly united; which being all the circumstances, that enter into the idea of cause and effect, when apply'd to the operations of matter, we may certainly conclude, that motion may be, and actually is, the cause of thought and perception.

There seems only this dilemma left us in the present case; either to assert, that nothing can be the cause of another, but where the mind can perceive the connexion in its idea of the objects: Or to maintain, that all objects, which we

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find constantly conjoin'd, are upon that account to be regarded as causes and effects. If we choose the first part of the dilemma, these are the consequences. *First*, We in reality affirm, that there is no such thing in the universe as a cause or productive principle, not even the deity himself; since our idea of that supreme Being is deriv'd from particular impressions, none of which contain any efficacy, nor seem to have *any* connexion with *any* other existence. As to what may be said, that the connexion betwixt the idea of an infinitely powerful being, and that of any effect, which he wills, is necessary and unavoidable; I answer, that we have no idea of a being endow'd with any power, much less of one endow'd with infinite power. But if we will change expressions, we can only define power by connexion; and then in saying, that the idea of an infinitely powerful being is connected with that of every effect, which he wills, we really do no more than assert, that a being, whose volition is connected with every effect, is connected with every effect; which is an identical proposition, and gives us no insight into the nature of this power or connexion. But, *secondly*, supposing, that the deity were the great and efficacious principle, which supplies the deficiency of all causes, this leads us into the grossest impieties and absurdities. For upon the same account, that we have recourse to him in natural operations, and assert that matter cannot of itself communicate motion, or produce thought, *viz.* because there is no apparent connexion betwixt these objects; I say, upon the very same account, we must acknowledge that the deity is the author of all our volitions and perceptions; since they have no more apparent connexion either with one another, or with the suppos'd but unknown substance of the soul. This agency of the supreme Being we know to have been asserted by[1] several philosophers with relation to all the actions of the mind, except volition, or rather an inconsiderable part of volition; tho' 'tis easy to perceive, that this exception is a mere pretext, to avoid the dangerous consequences of that doctrine. If nothing be active but what has an apparent power, thought is in no case any more active than matter; and if this inactivity must make us have recourse to a deity, the supreme being is the real cause of all our actions, bad as well as good, vicious as well as virtuous.[2]

[1] As father *Malebranche* and other *Cartesians*. [2] [Introd. Sect. 341.]

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Thus we are necessarily reduc'd to the other side of the dilemma, *viz.* that all objects, which are found to be constantly conjoin'd, are upon that account only to be regarded as causes and effects. Now as all objects, which are not contrary, are susceptible of a constant conjunction, and as no real objects are contrary[1]; it follows, that for ought we can determine by the mere ideas, any thing may be the cause or effect of any thing; which evidently gives the advantage to the materialists above their antagonists.

To pronounce, then, the final decision upon the whole; the question concerning the substance of the soul is absolutely unintelligible: All our perceptions are not susceptible of a local union, either with what is extended or unextended; there being some of them of the one kind, and some of the other: And as the constant conjunction of objects constitutes the very essence of cause and effect, matter and motion may often be regarded as the causes of thought, as far as we have any notion of that relation.

'Tis certainly a kind of indignity to philosophy, whose sovereign authority ought every where to be acknowledg'd, to oblige her on every occasion to make apologies for her conclusions, and justify herself to every particular art and science, which may be offended at her. This puts one in mind of a king arraign'd for high-treason against his subjects. There is only one occasion, when philosophy will think it necessary and even honourable to justify herself, and that is, when religion may seem to be in the least offended; whose rights are as dear to her as her own, and are indeed the same. If any one, therefore, shou'd imagine that the foregoing arguments are any ways dangerous to religion, I hope the following apology will remove his apprehensions.

There is no foundation for any conclusion *a priori*, either concerning the operations or duration of any object, of which 'tis possible for the human mind to form a conception. Any object may be imagin'd to become entirely inactive, or to be annihilated in a moment; and 'tis an evident principle, *that whatever we can imagine, is possible.* Now this is no more true of matter, than of spirit; of an extended compounded substance, than of a simple and unextended. In both cases the metaphysical arguments for the immortality of the soul are equally inconclusive; and in both cases the

[1] [See note on page 529.]

moral arguments and those deriv'd from the analogy of nature are equally strong and convincing. If my philosophy, therefore, makes no addition to the arguments for religion, I have at least the satisfaction to think it takes nothing from them, but that every thing remains precisely as before.

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SECT. VI.—*Of Personal Identity.*

There are some philosophers. who imagine we are every moment intimately conscious of what we call our SELF; that we feel its existence and its continuance in existence; and are certain, beyond the evidence of a demonstration, both of its perfect identity and simplicity. The strongest sensation, the most violent passion, say they, instead of distracting us from this view, only fix it the more intensely, and make us consider their influence on *self* either by their pain or pleasure. To attempt a farther proof of this were to weaken its evidence; since no proof can be deriv'd from any fact, of which we are so intimately conscious; nor is there any thing, of which we can be certain, if we doubt of this.

Unluckily all these positive assertions are contrary to that very experience, which is pleaded for them, nor have we any idea of *self*, after the manner it is here explain'd. For from what impression cou'd this idea be deriv'd? This question 'tis impossible to answer without a manifest contradiction and absurdity; and yet 'tis a question, which must necessarily be answer'd, if we wou'd have the idea of self pass for clear and intelligible. It must be some one impression, that gives rise to every real idea. But self or person is not any one impression, but that to which our several impressions and ideas are suppos'd to have a reference. If any impression gives rise to the idea of self, that impression must continue invariably the same, thro' the whole course of our lives; since self is suppos'd to exist after that manner. But there is no impression constant and invariable. Pain and pleasure, grief and joy, passions and sensations succeed each other, and never all exist at the same time. It cannot, therefore, be from any of these impressions, or from any other, that the idea of self is deriv'd; and consequently there is no such idea.[1]

But farther, what must become of all our particular per-

[1] [Introd. Sect. 205.]

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ceptions upon this hypothesis? All these are different, and distinguishable, and separable from each other, and may be separately consider'd, and may exist separately, and have no need of any thing to support their existence. After what manner, therefore, do they belong to self; and how are they connected with it? For my part, when I enter most intimately into what I call *myself*, I always stumble on some particular perception or other, of heat or cold, light or shade, love or hatred, pain or pleasure. I never can catch *myself* at any time without a perception, and never can observe any thing but the perception. When my perceptions are remov'd for any time, as by sound sleep; so long am I insensible of *myself*, and may truly be said not to exist. And were all my perceptions remov'd by death, and cou'd I neither think, nor feel, nor see, nor love, nor hate after the dissolution of my body, I shou'd be entirely annihilated, nor do I conceive what is farther requisite to make me a perfect non-entity. If any one, upon serious and unprejudic'd reflection, thinks he has a different notion of *himself*, I must confess I can reason no longer with him. All I can allow him is, that he may be in the right as well as I, and that we are essentially different in this particular. He may, perhaps, perceive something simple and continu'd, which he calls *himself*; tho' I am certain there is no such principle in me.

But setting aside some metaphysicians of this kind, I may venture to affirm of the rest of mankind, that they are nothing but a bundle or collection of different perceptions, which succeed each other with an inconceivable rapidity, and are in a perpetual flux and movement. Our eyes cannot turn in their sockets without varying our perceptions. Our thought is still more variable than our sight; and all our other senses and faculties contribute to this change; nor is there any single power of the soul, which remains unalterably the same, perhaps for one moment. The mind is a kind of theatre, where several perceptions successively make their appearance; pass, re-pass, glide away, and mingle in an infinite variety of postures and situations. There is properly no *simplicity* in it at one time, nor *identity* in different; whatever natural propension we may have to imagine that simplicity and identity. The comparison of the theatre must not mislead us. They are the successive perceptions only, that constitute the mind; nor have we the

most distant notion of the place, where these scenes are represented, or of the materials, of which it is compos'd.[1]

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What then gives us so great a propension to ascribe an identity to these successive perceptions, and to suppose ourselves possest of an invariable and uninterrupted existence thro' the whole course of our lives? In order to answer this question, we must distinguish betwixt personal identity, as it regards our thought or imagination, and as it regards our passions or the concern we take in ourselves. The first is our present subject; and to explain it perfectly we must take the matter pretty deep, and account for that identity, which we attribute to plants and animals; there being a great analogy betwixt it, and the identity of a self or person.

We have a distinct idea of an object, that remains invariable and uninterrupted thro' a suppos'd variation of time; and this idea we call that of *identity* or *sameness*. We have also a distinct idea of several different objects existing in succession, and connected together by a close relation;[2] and this to an accurate view affords as perfect a notion of *diversity*, as if there was no manner of relation among the objects. But tho' these two ideas of identity, and a succession of related objects be in themselves perfectly distinct, and even contrary, yet 'tis certain, that in our common way of thinking they are generally confounded with each other. That action of the imagination, by which we consider the uninterrupted and invariable object, and that by which we reflect on the succession of related objects, are almost the same to the feeling, nor is there much more effort of thought requir'd in the latter case than in the former. The relation facilitates the transition of the mind from one object to another, and renders its passage as smooth as if it contemplated one continu'd object. This resemblance is the cause of the confusion and mistake, and makes us substitute the notion of identity, instead of that of related objects. However at one instant we may consider the related succession as variable or interrupted, we are sure the next to ascribe to it a perfect identity, and regard it as invariable and uninterrupted. Our propensity to this mistake is so great from

[1] [Introd. Sect. 342.]

[2] [It is essential to bear in mind that throughout this passage 'relation' means 'natural relation' in Hume's sense of the term. See Part I. Sect. 5.]

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the resemblance above-mention'd, that we fall into it before we are aware; and tho' we incessantly correct ourselves by reflection, and return to a more accurate method of thinking, yet we cannot long sustain our philosophy, or take off this biass from the imagination. Our last resource is to yield to it, and boldly assert that these different related objects are in effect the same, however interrupted and variable. In order to justify to ourselves this absurdity, we often feign some new and unintelligible principle, that connects the objects together, and prevents their interruption or variation. Thus we feign the continu'd existence of the perceptions of our senses, to remove the interruption; and run into the notion of a *soul*, and *self*, and *substance*, to disguise the variation. But we may farther observe, that where we do not give rise to such a fiction, our propension to confound identity with relation is so great, that we are apt to imagine[1] something unknown and mysterious, connecting the parts, beside their relation; and this I take to be the case with regard to the identity we ascribe to plants and vegetables. And even when this does not take place, we still feel a propensity to confound these ideas, tho' we are not able fully to satisfy ourselves in that particular, nor find any thing invariable and uninterrupted to justify our notion of identity.[2]

Thus the controversy concerning identity is not merely a dispute of words. For when we attribute identity, in an improper sense, to variable or interrupted objects, our mistake is not confin'd to the expression, but is commonly attended with a fiction, either of something invariable and uninterrupted, or of something mysterious and inexplicable, or at least with a propensity to such fictions. What will suffice to prove this hypothesis to the satisfaction of every fair enquirer, is to shew from daily experience and observation, that the objects, which are variable or interrupted, and yet are suppos'd to continue the same, are such only as consist of a succession of parts, connected together by resemblance, contiguity, or causation. For as such a succession answers evidently to our notion of diversity, it can

[1] If the reader is desirous to see how a great genius may be influenc'd by these seemingly trivial principles of the imagination, as well as the mere vulgar, let him read my Lord *Shaftsbury's* reasonings concerning the uniting principle of the universe, and the identity of plants and animals. See his *Moralists:* or, *Philosophical rhapsody*.

[2] [Introd. Sect. 343.]

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only be by mistake we ascribe to it an identity; and as the relation of parts, which leads us into this mistake, is really nothing but a quality, which produces an association of ideas, and an easy transition of the imagination from one to another, it can only be from the resemblance, which this act of the mind bears to that, by which we contemplate one continu'd object, that the error arises. Our chief business, then, must be to prove, that all objects, to which we ascribe identity, without observing their invariableness and uninterruptedness, are such as consist of a succession of related objects.

In order to this, suppose any mass of matter, of which the parts are contiguous and connected, to be plac'd before us; 'tis plain we must attribute a perfect identity to this mass, provided all the parts continue uninterruptedly and invariably the same, whatever motion or change of place we may observe either in the whole or in any of the parts. But supposing some very *small* or *inconsiderable* part to be added to the mass, or substracted from it; tho' this absolutely destroys the identity of the whole, strictly speaking; yet as we seldom think so accurately, we scruple not to pronounce a mass of matter the same, where we find so trivial an alteration. The passage of the thought from the object before the change to the object after it, is so smooth and easy, that we scarce perceive the transition, and are apt to imagine, that 'tis nothing but a continu'd survey of the same object.

There is a very remarkable circumstance, that attends this experiment; which is, that tho' the change of any considerable part in a mass of matter destroys the identity of the whole, yet we must measure the greatness of the part, not absolutely, but by its *proportion* to the whole. The addition or diminution of a mountain wou'd not be sufficient to produce a diversity in a planet; tho' the change of a very few inches wou'd be able to destroy the identity of some bodies. 'Twill be impossible to account for this, but by reflecting that objects operate upon the mind, and break or interrupt the continuity of its actions not according to their real greatness, but according to their proportion to each other: And therefore, since this interruption makes an object cease to appear the same, it must be the uninterrupted progress of the thought, which constitutes the imperfect identity.

This may be confirm'd by another phænomenon. A change

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in any considerable part of a body destroys its identity; but 'tis remarkable, that where the change is produc'd *gradually* and *insensibly* we are less apt to ascribe to it the same effect. The reason can plainly be no other, than that the mind, in following the successive changes of the body, feels an easy passage from the surveying its condition in one moment to the viewing of it in another, and at no particular time perceives any interruption in its actions. From which continu'd perception, it ascribes a continu'd existence and identity to the object.

But whatever precaution we may use in introducing the changes gradually, and making them proportionable to the whole, 'tis certain, that where the changes are at last observ'd to become considerable, we make a scruple of ascribing identity to such different objects. There is, however, another artifice, by which we may induce the imagination to advance a step farther; and that is, by producing a reference of the parts to each other, and a combination to some *common end* or purpose. A ship, of which a considerable part has been chang'd by frequent reparations, is still consider'd as the same; nor does the difference of the materials hinder us from ascribing an identity to it. The common end, in which the parts conspire, is the same under all their variations, and affords an easy transition of the imagination from one situation of the body to another.

But this is still more remarkable, when we add a *sympathy* of parts to their *common end*, and suppose that they bear to each other, the reciprocal relation of cause and effect in all their actions and operations. This is the case with all animals and vegetables; where not only the several parts have a reference to some general purpose, but also a mutual dependance on, and connexion with each other. The effect of so strong a relation is, that tho' every one must allow, that in a very few years both vegetables and animals endure a *total* change, yet we still attribute identity to them, while their form, size, and substance are entirely alter'd. An oak, that grows from a small plant to a large tree, is still the same oak; tho' there be not one particle of matter, or figure of its parts the same. An infant becomes a man, and is sometimes fat, sometimes lean, without any change in his identity.

We may also consider the two following phænomena, which

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are remarkable in their kind. The first is, that tho' we commonly be able to distinguish pretty exactly betwixt numerical and specific identity, yet it sometimes happens, that we confound them, and in our thinking and reasoning employ the one for the other. Thus a man, who hears a noise, that is frequently interrupted and renew'd, says, it is still the same noise; tho' 'tis evident the sounds have only a specific identity or resemblance, and there is nothing numerically the same, but the cause, which produc'd them. In like manner it may be said without breach of the propriety of language, that such a church, which was formerly of brick, fell to ruin, and that the parish rebuilt the same church of free-stone, and according to modern architecture. Here neither the form nor materials are the same, nor is there any thing common to the two objects, but their relation to the inhabitants of the parish; and yet this alone is sufficient to make us denominate them the same. But we must observe, that in these cases the first object is in a manner annihilated before the second comes into existence; by which means, we are never presented in any one point of time with the idea of difference and multiplicity; and for that reason are less scrupulous in calling them the same.

Secondly, We may remark, that tho' in a succession of related objects, it be in a manner requisite, that the change of parts be not sudden nor entire, in order to preserve the identity, yet where the objects are in their nature changeable and inconstant, we admit of a more sudden transition, than wou'd otherwise be consistent with that relation. Thus as the nature of a river consists in the motion and change of parts; tho' in less than four and twenty hours these be totally alter'd; this hinders not the river from continuing the same during several ages. What is natural and essential to any thing is, in a manner, expected; and what is expected makes less impression, and appears of less moment, than what is unusual and extraordinary. A considerable change of the former kind seems really less to the imagination, than the most trivial alteration of the latter; and by breaking less the continuity of the thought, has less influence in destroying the identity.

We now proceed to explain the nature of *personal identity*, which has become so great a question in philosophy, especially of late years in *England*, where all the abstruser

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sciences are study'd with a peculiar ardour and application. And here 'tis evident, the same method of reasoning must be continu'd, which has so successfully explain'd the identity of plants, and animals, and ships, and houses, and of all the compounded and changeable productions either of art or nature. The identity, which we ascribe to the mind of man, is only a fictitious one, and of a like kind with that which we ascribe to vegetables and animal bodies.[1] It cannot, therefore, have a different origin, but must proceed from a like operation of the imagination upon like objects.

But lest this argument shou'd not convince the reader; tho' in my opinion perfectly decisive; let him weigh the following reasoning, which is still closer and more immediate. 'Tis evident, that the identity, which we attribute to the human mind, however perfect we may imagine it to be, is not able to run the several different perceptions into one, and make them lose their characters of distinction and difference, which are essential to them. 'Tis still true, that every distinct perception, which enters into the composition of the mind, is a distinct existence, and is different, and distinguishable, and separable from every other perception, either contemporary or successive. But, as, notwithstanding this distinction and separability, we suppose the whole train of perceptions to be united by identity, a question naturally arises concerning this relation of identity; whether it be something that really binds our several perceptions together, or only associates their ideas in the imagination. That is, in other words, whether in pronouncing concerning the identity of a person, we observe some real bond among his perceptions, or only feel one among the ideas we form of them. This question we might easily decide, if we wou'd recollect what has been already prov'd at large, that the understanding never observes any real connexion among objects, and that even the union of cause and effect, when strictly examin'd, resolves itself into a customary association of ideas. For from thence it evidently follows, that identity is nothing really belonging to these different perceptions, and uniting them together; but is merely a quality, which we attribute to them, because of the union of their ideas in the imagination, when we reflect upon them. Now the only qualities, which can give ideas an union in the imagination,

[1] [Introd. § 345.]

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are these three relations above-mention'd. These are the uniting principles in the ideal world, and without them every distinct object is separable by the mind, and may be separately consider'd, and appears not to have any more connexion with any other object, than if disjoin'd by the greatest difference and remoteness. 'Tis, therefore, on some of these three relations of resemblance, contiguity and causation, that identity depends; and as the very essence of these relations consists in their producing an easy transition of ideas; it follows, that our notions of personal identity, proceed entirely from the smooth and uninterrupted progress of the thought along a train of connected ideas, according to the principles above-explain'd.[1]

The only question, therefore, which remains, is, by what relations this uninterrupted progress of our thought is produc'd, when we consider the successive existence of a mind or thinking person. And here 'tis evident we must confine ourselves to resemblance and causation, and must drop contiguity, which has little or no influence in the present case.

To begin with *resemblance*; suppose we cou'd see clearly into the breast of another, and observe that succession of perceptions, which constitutes his mind or thinking principle, and suppose that he always preserves the memory of a considerable part of past perceptions; 'tis evident that nothing cou'd more contribute to the bestowing a relation on this succession amidst all its variations. For what is the memory but a faculty, by which we raise up the images of past perceptions? And as an image necessarily resembles its object, must not the frequent placing of these resembling perceptions in the chain of thought, convey the imagination more easily from one link to another, and make the whole seem like the continuance of one object? In this particular, then, the memory not only discovers the identity, but also contributes to its production, by producing the relation of resemblance among the perceptions. The case is the same whether we consider ourselves or others.

As to *causation*; we may observe, that the true idea of the human mind, is to consider it as a system of different perceptions or different existences, which are link'd together by the relation of cause and effect, and mutually produce, de-

[1] [See also Appendix, p. 559.—Ed.]

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stroy, influence, and modify each other.[1] Our impressions give rise to their correspondent ideas; and these ideas in their turn produce other impressions. One thought chaces another, and draws after it a third, by which it is expell'd in its turn. In this respect, I cannot compare the soul more properly to any thing than to a republic or commonwealth, in which the several members are united by the reciprocal ties of government and subordination, and give rise to other persons, who propagate the same republic in the incessant changes of its parts. And as the same individual republic may not only change its members, but also its laws and constitutions; in like manner the same person may vary his character and disposition, as well as his impressions and ideas, without losing his identity. Whatever changes he endures, his several parts are still connected by the relation of causation. And in this view our identity with regard to the passions serves to corroborate that with regard to the imagination, by the making our distant perceptions influence each other, and by giving us a present concern for our past or future pains or pleasures.

As a memory alone acquaints us with the continuance and extent of this succession of perceptions, 'tis to be considered, upon that account chiefly, as the source of personal identity. Had we no memory, we never shou'd have any notion of causation, nor consequently of that chain of causes and effects, which constitute our self or person. But having once acquir'd this notion of causation from the memory, we can extend the same chain of causes, and consequently the identity of our persons beyond our memory, and can comprehend times, and circumstances, and actions, which we have entirely forgot, but suppose in general to have existed. For how few of our past actions are there, of which we have any memory? Who can tell me, for instance, what were his thoughts and actions on the 1st of *January* 1715, the 11th of *March* 1719, and the 3rd of *August* 1733? Or will he affirm, because he has entirely forgot the incidents of these days, that the present self is not the same person with the self of that time; and by that means overturn all the most establish'd notions of personal identity? In this view, therefore, memory does not so much *produce* as *discover* personal

[1] [Introd. § 346. Cf. also p. 455—'No internal impression has an apparent energy, more than external objects have.']

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identity, by shewing us the relation of cause and effect among our different perceptions. 'Twill be incumbent on those, who affirm that memory produces entirely our personal identity, to give a reason why we can thus extend our identity beyond our memory.

The whole of this doctrine leads us to a conclusion, which is of great importance in the present affair, *viz.* that all the nice and subtile questions concerning personal identity can never possibly be decided, and are to be regarded rather as grammatical than as philosophical difficulties. Identity depends on the relations of ideas; and these relations produce identity, by means of that easy transition they occasion.[1] But as the relations, and the easiness of the transition may diminish by insensible degrees, we have no just standard, by which we can decide any dispute concerning the time, when they acquire or lose a title to the name of identity. All the disputes concerning the identity of connected objects are merely verbal, except so far as the relation of parts gives rise to some fiction or imaginary principle of union, as we have already observ'd.

What I have said concerning the first origin and uncertainty of our notion of identity, as apply'd to the human mind, may be extended with little or no variation to that of *simplicity*. An object, whose different co-existent parts are bound together by a close relation, operates upon the imagination after much the same manner as one perfectly simple and indivisible, and requires not a much greater stretch of thought in order to its conception. From this similarity of operation we attribute a simplicity to it, and feign a principle of union as the support of this simplicity, and the center of all the different parts and qualities of the object.

Thus we have finish'd our examination of the several systems of philosophy, both of the intellectual and natural world; and in our miscellaneous way of reasoning have been led into several topics; which will either illustrate and confirm some preceding part of this discourse, or prepare the way for our following opinions. 'Tis now time to return to a more close examination of our subject, and to proceed in the accurate anatomy of human nature, having fully explain'd the nature of our judgment and understanding.[2]

[1] [Introd. § 345, note.]

[2] [This subject is further pursued in the second division of the Appendix, p. 548.—Ed.]

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But before I launch out into those immense depths of philosophy, which lie before me, I find myself inclin'd to stop a moment in my present station, and to ponder that voyage, which I have undertaken, and which undoubtedly requires the utmost art and industry to be brought to a happy conclusion. Methinks I am like a man, who having struck on many shoals, and having narrowly escap'd shipwreck in passing a small frith, has yet the temerity to put out to sea in the same leaky weather-beaten vessel, and even carries his ambition so far as to think of compassing the globe under these disadvantageous circumstances. My memory of past errors and perplexities, makes me diffident for the future. The wretched condition, weakness, and disorder of the faculties, I must employ in my enquiries, encrease my apprehensions. And the impossibility of amending or correcting these faculties, reduces me almost to despair, and makes me resolve to perish on the barren rock, on which I am at present, rather than venture myself upon that boundless ocean, which runs out into immensity. This sudden view of my danger strikes me with melancholy; and as 'tis usual for that passion, above all others, to indulge itself; I cannot forbear feeding my despair, with all those desponding reflections, which the present subject furnishes me with in such abundance.

I am first affrighted and confounded with that forelorn solitude, in which I am plac'd in my philosophy, and fancy myself some strange uncouth monster, who not being able to mingle and unite in society, has been expell'd all human commerce, and left utterly abandon'd and disconsolate. Fain wou'd I run into the crowd for shelter and warmth; but cannot prevail with myself to mix with such deformity. I call upon others to join me, in order to make a company apart; but no one will hearken to me. Every one keeps at a distance, and dreads that storm, which beats upon me from every side. I have expos'd myself to the enmity of all metaphysicians, logicians, mathematicians, and even theologians; and can I wonder at the insults I must suffer? I have declar'd my dis-approbation of their systems; and can I be surpriz'd, if they shou'd express a hatred of mine and

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of my person? When I look abroad, I foresee on every side, dispute, contradiction, anger, calumny and detraction. When I turn my eye inward, I find nothing but doubt and ignorance. All the world conspires to oppose and contradict me; tho' such is my weakness, that I feel all my opinions loosen and fall of themselves, when unsupported by the approbation of others. Every step I take is with hesitation, and every new reflection makes me dread an error and absurdity in my reasoning.

For with what confidence can I venture upon such bold enterprizes, when beside those numberless infirmities peculiar to myself, I find so many which are common to human nature? Can I be sure, that in leaving all establish'd opinions I am following truth; and by what criterion shall I distinguish her, even if fortune shou'd at last guide me on her foot-steps? After the most accurate and exact of my reasonings, I can give no reason why I shou'd assent to it; and feel nothing but a *strong* propensity to consider objects *strongly* in that view, under which they appear to me. Experience is a principle, which instructs me in the several conjunctions of objects for the past. Habit is another principle, which determines me to expect the same for the future; and both of them conspiring to operate upon the imagination, make me form certain ideas in a more intense and lively manner, than others, which are not attended with the same advantages. Without this quality, by which the mind enlivens some ideas beyond others (which seemingly is so trivial, and so little founded on reason) we cou'd never assent to any argument, nor carry our view beyond those few objects, which are present to our senses. Nay, even to the objects we cou'd never attribute any existence, but what was dependent on the senses; and must comprehend them entirely in that succession of perceptions, which constitutes our self or person. Nay farther, even with relation to that succession, we cou'd only admit of those perceptions, which are immediately present to our consciousness, nor cou'd those lively images, with which the memory presents us, be ever receiv'd as true pictures of past perceptions. The memory, senses, and understanding are, therefore, all of them founded on the imagination, or the vivacity of our ideas.

No wonder a principle so inconstant and fallacious shou'd lead us into errors, when implicitly follow'd (as it must be)

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in all its variations. 'Tis this principle, which makes us reason from causes and effects; and 'tis the same principle, which convinces us of the continu'd existence of external objects, when absent from the senses. But tho' these two operations be equally natural and necessary in the human mind, yet in some circumstances they are[1] directly contrary, nor is it possible for us to reason justly and regularly from causes and effects, and at the same time believe the continu'd existence of matter. How then shall we adjust those principles together? Which of them shall we prefer? Or in case we prefer neither of them, but successively assent to both, as is usual among philosophers, with what confidence can we afterwards usurp that glorious title, when we thus knowingly embrace a manifest contradiction?

This[2] contradiction wou'd be more excusable, were it compensated by any degree of solidity and satisfaction in the other parts of our reasoning. But the case is quite contrary. When we trace up the human understanding to its first principles, we find it to lead us into such sentiments, as seem to turn into ridicule all our past pains and industry, and to discourage us from future enquiries. Nothing is more curiously enquir'd after by the mind of man, than the causes of every phænomenon; nor are we content with knowing the immediate causes, but push on our enquiries, till we arrive at the original and ultimate principle. We wou'd not willingly stop before we are acquainted with that energy in the cause, by which it operates on its effect; that tie, which connects them together; and that efficacious quality, on which the tie depends. This is our aim in all our studies and reflections: And how must we be disappointed, when we learn, that this connexion, tie, or energy lies merely in ourselves, and is nothing but that determination of the mind, which is acquir'd by custom, and causes us to make a transition from an object to its usual attendant, and from the impression of one to the lively idea of the other? Such a discovery not only cuts off all hope of ever attaining satisfaction, but even prevents our very wishes; since it appears, that when we say we desire to know the ultimate and operating principle, as something, which resides in the external object, we either contradict ourselves, or talk without a meaning.

[1] Sect. 4.

[2] Part III. Sect. 14.

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This deficiency in our ideas is not, indeed, perceiv'd in common life, nor are we sensible, that in the most usual conjunctions of cause and effect we are as ignorant of the ultimate principle, which binds them together, as in the most unusual and extraordinary. But this proceeds merely from an illusion of the imagination; and the question is, how far we ought to yield to these illusions. This question is very difficult, and reduces us to a very dangerous dilemma, whichever way we answer it. For if we assent to every trivial suggestion of the fancy; beside that these suggestions are often contrary to each other; they lead us into such errors, absurdities, and obscurities, that we must at last become asham'd of our credulity. Nothing is more dangerous to reason than the flights of the imagination, and nothing has been the occasion of more mistakes among philosophers. Men of bright fancies may in this respect be compar'd to those angels, whom the scripture represents as covering their eyes with their wings. This has already appear'd in so many instances, that we may spare ourselves the trouble of enlarging upon it any farther.

But on the other hand, if the consideration of these instances makes us take a resolution to reject all the trivial suggestions of the fancy, and adhere to the understanding, that is. to the general and more establish'd properties of the imagination; even this resolution, if steadily executed, wou'd be dangerous, and attended with the most fatal consequences. For I have already shewn,[1] that the understanding, when it acts alone, and according to its most general principles, entirely subverts itself, and leaves not the lowest degree of evidence in any proposition, either in philosophy or common life. We save ourselves from this total scepticism only by means of that singular and seemingly trivial property of the fancy, by which we enter with difficulty into remote views of things, and are not able to accompany them with so sensible an impression, as we do those, which are more easy and natural. Shall we, then, establish it for a general maxim, that no refin'd or elaborate reasoning is ever to be receiv'd? Consider well the consequences of such a principle. By this means you cut off entirely all science and philosophy: You proceed upon one singular quality of the imagination, and by a parity of reason must embrace all

[1] Sect. 1.

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of them: And you expressly contradict yourself; since this maxim must be built on the preceding reasoning, which will be allow'd to be sufficiently refin'd and metaphysical. What party, then, shall we choose among these difficulties? If we embrace this principle, and condemn all refin'd reasoning, we run into the most manifest absurdities. If we reject it in favour of these reasonings, we subvert entirely the human understanding. We have, therefore, no choice left but betwixt a false reason and none at all. For my part, I know not what ought to be done in the present case. I can only observe what is commonly done; which is, that this difficulty is seldom or never thought of; and even where it has once been present to the mind, is quickly forgot, and leaves but a small impression behind it. Very refin'd reflections have little or no influence upon us; and yet we do not, and cannot establish it for a rule, that they ought not to have any influence; which implies a manifest contradiction.

But what have I here said, that reflections very refin'd and metaphysical have little or no influence upon us? This opinion I can scarce forbear retracting, and condemning from my present feeling and experience. The *intense* view of these manifold contradictions and imperfections in human reason has so wrought upon me, and heated my brain, that I am ready to reject all belief and reasoning, and can look upon no opinion even as more probable or likely than another. Where am I, or what? From what causes do I derive my existence, and to what condition shall I return? Whose favour shall I court, and whose anger must I dread? What beings surround me? and on whom have I any influence, or who have any influence on me? I am confounded with all these questions, and begin to fancy myself in the most deplorable condition imaginable, inviron'd with the deepest darkness, and utterly depriv'd of the use of every member and faculty.

Most fortunately it happens, that since reason is incapable of dispelling these clouds, nature herself suffices to that purpose, and cures me of this philosophical melancholy and delirium, either by relaxing this bent of mind, or by some avocation, and lively impression of my senses, which obliterate all these chimeras. I dine, I play a game of backgammon, I converse, and am merry with my friends; and

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when after three or four hours' amusement, I wou'd return to these speculations, they appear so cold, and strain'd, and ridiculous, that I cannot find in my heart to enter into them any farther.

Here then I find myself absolutely and necessarily determin'd to live, and talk, and act like other people in the common affairs of life. But notwithstanding that my natural propensity, and the course of my animal spirits and passions reduce me to this indolent belief in the general maxims of the world, I still feel such remains of my former disposition, that I am ready to throw all my books and papers into the fire, and resolve never more to renounce the pleasures of life for the sake of reasoning and philosophy. For those are my sentiments in that splenetic humour, which governs me at present. I may, nay I must yield to the current of nature, in submitting to my senses and understanding; and in this blind submission I shew most perfectly my sceptical disposition and principles. But does it follow, that I must strive against the current of nature, which leads me to indolence and pleasure; that I must seclude myself, in some measure, from the commerce and society of men, which is so agreeable; and that I must torture my brains with subtilities and sophistries, at the very time that I cannot satisfy myself concerning the reasonableness of so painful an application, nor have any tolerable prospect of arriving by its means at truth and certainty. Under what obligation do I lie of making such an abuse of time? And to what end can it serve either for the service of mankind, or for my own private interest? No: If I must be a fool, as all those who reason or believe any thing *certainly* are, my follies shall at least be natural and agreeable. Where I strive against my inclination, I shall have a good reason for my resistance; and will no more be led a wandering into such dreary solitudes, and rough passages, as I have hitherto met with.

These are the sentiments of my spleen and indolence; and indeed I must confess, that philosophy has nothing to oppose to them, and expects a victory more from the returns of a serious good-humour'd disposition, than from the force of reason and conviction. In all the incidents of life we ought still to preserve our scepticism. If we believe, that fire warms, or water refreshes, 'tis only because it costs us too

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much pains to think otherwise. Nay if we are philosophers, it ought only to be upon sceptical principles, and from an inclination, which we feel to the employing ourselves after that manner. Where reason is lively, and mixes itself with some propensity, it ought to be assented to. Where it does not, it never can have any title to operate upon us.

At the time, therefore, that I am tir'd with amusement and company, and have indulg'd a *reverie* in my chamber, or in a solitary walk by a river-side, I feel my mind all collected within itself, and am naturally *inclin'd* to carry my view into all those subjects, about which I have met with so many disputes in the course of my reading and conversation. I cannot forbear having a curiosity to be acquainted with the principles of moral good and evil, the nature and foundation of government, and the cause of those several passions and inclinations, which actuate and govern me. I am uneasy to think I approve of one object, and disapprove of another; call one thing beautiful, and another deform'd; decide concerning truth and falshood, reason and folly, without knowing upon what principles I proceed. I am concern'd for the condition of the learned world, which lies under such a deplorable ignorance in all these particulars. I feel an ambition to arise in me of contributing to the instruction of mankind, and of acquiring a name by my inventions and discoveries. These sentiments spring up naturally in my present disposition; and shou'd I endeavour to banish them, by attaching myself to any other business or diversion, I *feel* I shou'd be a loser in point of pleasure; and this is the origin of my philosophy.

But even suppose this curiosity and ambition shou'd not transport me into speculations without the sphere of common life, it wou'd necessarily happen, that from my very weakness I must be led into such enquiries. 'Tis certain, that superstition is much more bold in its systems and hypotheses than philosophy; and while the latter contents itself with assigning new causes and principles to the phænomena, which appear in the visible world, the former opens a world of its own, and presents us with scenes, and beings, and objects, which are altogether new: Since therefore 'tis almost impossible for the mind of man to rest, like those of beasts, in that narrow circle of objects, which are the subject of daily conversation and action, we ought only to deliberate con-

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cerning the choice of our guide, and ought to prefer that which is safest and most agreeable. And in this respect I make bold to recommend philosophy, and shall not scruple to give it the preference to superstition of every kind or denomination. For as superstition arises naturally and easily from the popular opinions of mankind, it seizes more strongly on the mind, and is often able to disturb us in the conduct of our lives and actions. Philosophy on the contrary, if just, can present us only with mild and moderate sentiments; and if false and extravagant, its opinions are merely the objects of a cold and general speculation, and seldom go so far as to interrupt the course of our natural propensities. The CYNICS are an extraordinary instance of philosophers, who from reasonings purely philosophical ran into as great extravagancies of conduct as any *Monk* or *Dervise* that ever was in the world. Generally speaking, the errors in religion are dangerous; those in philosophy only ridiculous.

I am sensible, that these two cases of the strength and weakness of the mind will not comprehend all mankind, and that there are in *England*, in particular, many honest gentlemen, who being always employ'd in their domestic affairs, or amusing themselves in common recreations, have carried their thoughts very little beyond those objects, which are every day expos'd to their senses. And indeed, of such as these I pretend not to make philosophers, nor do I expect them either to be associates in these researches or auditors of these discoveries. They do well to keep themselves in their present situation; and instead of refining them into philosophers, I wish we cou'd communicate to our founders of systems, a share of this gross earthy mixture, as an ingredient, which they commonly stand much in need of, and which wou'd serve to temper those fiery particles, of which they are compos'd. While a warm imagination is allow'd to enter into philosophy, and hypotheses embrac'd merely for being specious and agreeable, we can never have any steady principles, nor any sentiments, which will suit with common practice and experience. But were these hypotheses once remov'd, we might hope to establish a system or set of opinions, which if not true (for that, perhaps, is too much to be hop'd for) might at least be satisfactory to the human mind, and might stand the test of the most critical examination. Nor shou'd

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we despair of attaining this end, because of the many chimerical systems, which have successively arisen and decay'd away among men, wou'd we consider the shortness of that period, wherein these questions have been the subjects of enquiry and reasoning. Two thousand years with such long interruptions, and under such mighty discouragements are a small space of time to give any tolerable perfection to the sciences; and perhaps we are still in too early an age of the world to discover any principles, which will bear the examination of the latest posterity. For my part, my only hope is, that I may contribute a little to the advancement of knowledge, by giving in some particulars a different turn to the speculations of philosophers, and pointing out to them more distinctly those subjects, where alone they can expect assurance and conviction. Human Nature is the only science of man; and yet has been hitherto the most neglected. 'Twill be sufficient for me, if I can bring it a little more into fashion; and the hope of this serves to compose my temper from that spleen, and invigorate it from that indolence, which sometimes prevail upon me. If the reader finds himself in the same easy disposition, let him follow me in my future speculations. If not, let him follow his inclination, and wait the returns of application and good humour. The conduct of a man, who studies philosophy in this careless manner, is more truly sceptical than that of one, who feeling in himself an inclination to it, is yet so over-whelm'd with doubts and scruples, as totally to reject it. A true sceptic will be diffident of his philosophical doubts, as well as of his philosophical conviction; and will never refuse any innocent satisfaction, which offers itself, upon account of either of them.

Nor is it only proper we shou'd in general indulge our inclination in the most elaborate philosophical researches, notwithstanding our sceptical principles, but also that we shou'd yield to that propensity, which inclines us to be positive and certain in *particular points*, according to the light, in which we survey them in any *particular instant*. 'Tis easier to forbear all examination and enquiry, than to check ourselves in so natural a propensity, and guard against that assurance, which always arises from an exact and full survey of an object. On such an occasion we are apt not only to forget our scepticism, but even our modesty too;

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and make use of such terms as these, *'tis evident*, *'tis certain*, *'tis undeniable*; which a due deference to the public ought, perhaps, to prevent. I may have fallen into this fault after the example of others; but I here enter a *caveat* against any objections, which may be offer'd on that head; and declare that such expressions were extorted from me by the present view of the object, and imply no dogmatical spirit, nor conceited idea of my own judgment, which are sentiments that I am sensible can become no body, and a sceptic still less than any other.

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APPENDIX.[1]

APPX.

THERE is nothing I wou'd more willingly lay hold of, than an opportunity of confessing my errors; and shou'd esteem such a return to truth and reason to be more honourable than the most unerring judgment. A man, who is free from mistakes, can pretend to no praises, except from the justness of his understanding: But a man, who corrects his mistakes, shews at once the justness of his understanding, and the candour and ingenuity of his temper. I have not yet been so fortunate as to discover any very considerable mistakes in the reasonings deliver'd in the preceding volumes, except on one article: But I have found by experience, that some of my expressions have not been so well chosen, as to guard against all mistakes in the readers; and 'tis chiefly to remedy this defect, I have subjoin'd the following appendix.

We can never be induc'd to believe any matter of fact, except where its cause, or its effect, is present to us; but what the nature is of that belief, which arises from the relation of cause and effect, few have had the curiosity to ask themselves. In my opinion, this dilemma is inevitable. Either the belief is some new idea, such as that of *reality* or *existence*, which we join to the simple conception of an object, or it is merely a peculiar *feeling* or *sentiment*. That it is not a new idea, annex'd to the simple conception, may be evinc'd from these two arguments. *First*, We have no abstract idea of existence, distinguishable and separable from the idea of particular objects. 'Tis impossible, therefore, that this idea of existence can be annex'd to the idea of any object, or form the difference betwixt a simple conception and belief. *Secondly*, The mind has the command over all its ideas, and can separate, unite, mix, and vary them, as it pleases; so that if belief consisted merely in a new idea, annex'd to the conception, it wou'd be in a man's power to believe what he pleas'd. We may, therefore, conclude, that belief consists merely in a certain feeling or sentiment; in something, that depends not on the will, but must arise from certain determinate causes and principles, of which we are not masters. When we are convinc'd of any matter of fact, we do nothing but conceive it, along with a certain feeling, different from what attends the mere *reveries* of the imagination. And when we express our incredulity concerning any fact, we mean, that the arguments for the fact produce not that feeling. Did not the belief consist in a sentiment different

[1] This Appendix was added in Vol. III. of the original edition, 1740.—Ed.

APPX. from our mere conception, whatever objects were presented by the wildest imagination, wou'd be on an equal footing with the most establish'd truths founded on history and experience. There is nothing but the feeling, or sentiment, to distinguish the one from the other.

This, therefore, being regarded as an undoubted truth, *that belief is nothing but a peculiar feeling, different from the simple conception*, the next question, that naturally occurs, is, *what is the nature of this feeling, or sentiment, and whether it be analogous to any other sentiment of the human mind?* This question is important. For if it be not analogous to any other sentiment, we must despair of explaining its causes, and must consider it as an original principle of the human mind. If it be analogous, we may hope to explain its causes from analogy, and trace it up to more general principles. Now that there is a greater firmness and solidity in the conceptions, which are the objects of conviction and assurance, than in the loose and indolent reveries of a castle-builder, every one will readily own. They strike upon us with more force; they are more present to us; the mind has a firmer hold of them, and is more actuated and mov'd by them. It acquiesces in them; and, in a manner, fixes and reposes itself on them. In short, they approach nearer to the impressions, which are immediately present to us; and are therefore analogous to many other operations of the mind.

There is not, in my opinion, any possibility of evading this conclusion, but by asserting, that belief, beside the simple conception, consists in some impression or feeling, distinguishable from the conception. It does not modify the conception, and render it more present and intense: It is only annex'd to it, after the same manner that *will* and *desire* are annex'd to particular conceptions of good and pleasure. But the following considerations will, I hope, be sufficient to remove this hypothesis. *First*, It is directly contrary to experience, and our immediate consciousness. All men have ever allow'd reasoning to be merely an operation of our thoughts or ideas; and however those ideas may be varied to the feeling, there is nothing ever enters into our *conclusions* but ideas, or our fainter conceptions. For instance; I hear at present a person's voice, whom I am acquainted with; and this sound comes from the next room. This impression of my senses immediately conveys my thoughts to the person, along with all the surrounding objects. I paint them out to myself as existent at present, with the same qualities and relations, that I formerly knew them possess'd of. These ideas take faster hold of my mind, than the ideas of an inchanted castle. They are different to the feeling; but there is no distinct or separate impression attending them. 'Tis the same case when I recollect the several incidents of a journey, or the events of any history. Every particular fact is there the object of belief. Its idea is modified differently from the loose reveries of a castle-builder: But no distinct impression attends every distinct idea, or conception of matter of fact. This is the subject of plain experience. If ever this experience can be disputed on any occasion, 'tis when the mind has been agitated with doubts and difficulties; and afterwards, upon taking the object in a new point of view, or being presented with a new argument, fixes and reposes itself in one settled conclusion and belief. In this case there

is a feeling distinct and separate from the conception. The passage from doubt and agitation to tranquility and repose, conveys a satisfaction and pleasure to the mind. But take any other case. Suppose I see the legs and thighs of a person in motion, while some interpos'd object conceals the rest of his body. Here 'tis certain, the imagination spreads out the whole figure. I give him a head and shoulders, and breast and neck. These members I conceive and believe him to be possess'd of. Nothing can be more evident, than that this whole operation is perform'd by the thought or imagination alone. The transition is immediate. The ideas presently strike us. Their customary connexion with the present impression, varies them and modifies them in a certain manner, but produces no act of the mind, distinct from this peculiarity of conception. Let any one examine his own mind, and he will evidently find this to be the truth.

Secondly, Whatever may be the case, with regard to this distinct impression, it must be allow'd, that the mind has a firmer hold, or more steady conception of what it takes to be matter of fact, than of fictions. Why then look any farther, or multiply suppositions without necessity?

Thirdly, We can explain the *causes* of the firm conception, but not those of any separate impression. And not only so, but the causes of the firm conception exhaust the whole subject, and nothing is left to produce any other effect. An inference concerning a matter of fact is nothing but the idea of an object, that is frequently conjoin'd, or is associated with a present impression. This is the whole of it. Every part is requisite to explain, from analogy, the more steady conception; and nothing remains capable of producing any distinct impression.

Fourthly, The *effects* of belief, in influencing the passions and imagination, can all be explain'd from the firm conception; and there is no occasion to have recourse to any other principle. These arguments, with many others, enumerated in the foregoing volumes, sufficiently prove, that belief only modifies the idea or conception; and renders it different to the feeling, without producing any distinct impression.

Thus upon a general view of the subject, there appear to be two questions of importance, which we may venture to recommend to the consideration of philosophers, *Whether there be any thing to distinguish belief from the simple conception beside the feeling or sentiment?* And, *Whether this feeling be any thing but a firmer conception, or a faster hold, that we take of the object?*

If, upon impartial enquiry, the same conclusion, that I have form'd, be assented to by philosophers, the next business is to examine the analogy, which there is betwixt belief, and other acts of the mind, and find the cause of the firmness and strength of conception: And this I do not esteem a difficult task. The transition from a present impression, always enlivens and strengthens any idea. When any object is presented, the idea of its usual attendant immediately strikes us, as something real and solid. 'Tis *felt*, rather than conceiv'd, and approaches the impression, from which it is deriv'd, in its force and influence. This I have prov'd at large. I cannot add any new arguments; tho' perhaps my reasoning on this whole question, concerning cause and effect, wou'd have been more convincing, had the following

APPX. passages been inserted in the places, which I have marked for them. I have added a few illustrations on other points, where I thought it necessary.

[The additions will be found incorporated with the text at pages 386, 397, 401, 421, and 455.—Ed.]

I had entertain'd some hopes, that however deficient our theory of the intellectual world might be, it wou'd be free from those contradictions, and absurdities, which seem to attend every explication, that human reason can give of the material world. But upon a more strict review of the section concerning *personal identity*, I find myself involv'd in such a labyrinth, that, I must confess, I neither know how to correct my former opinions, now how to render them consistent. If this be not a good *general* reason for scepticism, 'tis at least a sufficient one (if I were not already abundantly supplied) for me to entertain a diffidence and modesty in all my decisions. I shall propose the arguments on both sides, beginning with those that induc'd me to deny the strict and proper identity and simplicity of a self or thinking being.

When we talk of *self* or *substance*, we must have an idea annex'd to these terms, otherwise they are altogether unintelligible. Every idea is deriv'd from preceding impressions; and we have no impression of self or substance, as something simple or individual. We have, therefore, no idea of them in that sense.

Whatever is distinct, is distinguishable; and whatever is distinguishable, is separable by the thought or imagination. All perceptions are distinct. They are, therefore, distinguishable, and separable, and may be conceiv'd as separately existent, and may exist separately, without any contradiction or absurdity.

When I view this table and that chimney, nothing is present to me but particular perceptions, which are of a like nature with all the other perceptions. This is the doctrine of philosophers. But this table, which is present to me, and that chimney, may and do exist separately. This is the doctrine of the vulgar, and implies no contradiction. There is no contradiction, therefore, in extending the same doctrine to all the perceptions.

In general, the following reasoning seems satisfactory. All ideas are borrow'd from preceding perceptions. Our ideas of objects, therefore, are deriv'd from that source. Consequently no proposition can be intelligible or consistent with regard to objects, which is not so with regard to perceptions. But 'tis intelligible and consistent to say, that objects exist distinct and independent, without any common *simple* substance or subject of inhesion. This proposition, therefore, can never be absurd with regard to perceptions.[1]

When I turn my reflection on *myself*, I can never perceive this *self* without some one or more perceptions; nor can I ever perceive any thing but the perceptions. 'Tis the composition of these, therefore, which forms the self.

We can conceive a thinking being to have either many or few per-

[1] [Introd. §§ 304 and 306.]

ceptions. Suppose the mind to be reduc'd even below the life of an oyster. Suppose it to have only one perception, as of thirst or hunger. Consider it in that situation. Do you conceive any thing but merely that perception? Have you any notion of *self* or *substance?* If not, the addition of other perceptions can never give you that notion.

The annihilation, which some people suppose to follow upon death, and which entirely destroys this self, is nothing but an extinction of all particular perceptions; love and hatred, pain and pleasure, thought and sensation. These therefore must be the same with self; since the one cannot survive the other.

Is *self* the same with *substance?* If it be, how can that question have place, concerning the subsistence of self, under a change of substance? If they be distinct, what is the difference betwixt them? For my part, I have a notion of neither, when conceiv'd distinct from particular perceptions.

Philosophers begin to be reconcil'd to the principle, *that we have no idea of external substance, distinct from the ideas of particular qualities.* This must pave the way for a like principle with regard to the mind, *that we have no notion of it, distinct from the particular perceptions.*

So far I seem to be attended with sufficient evidence. But having thus loosen'd all our particular perceptions, when[1] I proceed to explain the principle of connexion, which binds them together, and makes us attribute to them a real simplicity and identity; I am sensible, that my account is very defective, and that nothing but the seeming evidence of the precedent reasonings cou'd have induc'd me to receive it. If perceptions are distinct existences, they form a whole only by being connected together. But no connexions among distinct existences are ever discoverable by human understanding. We only *feel* a connexion or determination of the thought, to pass from one object to another. It follows, therefore, that the thought alone finds personal identity, when reflecting on the train of past perceptions, that compose a mind, the ideas of them are felt to be connected together, and naturally introduce each other. However extraordinary this conclusion may seem, it need not surprize us. Most philosophers seem inclin'd to think, that personal identity *arises* from consciousness; and consciousness is nothing but a reflected thought or perception. The present philosophy, therefore, has so far a promising aspect. But all my hopes vanish, when I come to explain the principles, that unite our successive perceptions in our thought or consciousness. I cannot discover any theory, which gives me satisfaction on this head.

In short there are two principles, which I cannot render consistent; nor is it in my power to renounce either of them, viz. *that all our distinct perceptions are distinct existences*, and *that the mind never perceives any real connexion among distinct existences.* Did our perceptions either inhere in something simple and individual, or did the mind perceive some real connexion among them, there wou'd be no difficulty in the case. For my part, I must plead the privilege of a sceptic, and confess, that this difficulty is too hard for my understanding. I pretend not, however, to pronounce it absolutely insuperable. Others,

[1] p. 540.

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I shall also take this opportunity of confessing two other errors of less importance, which more mature reflection has discover'd to me in my reasoning. The first may be found in Vol. I. page 362, where I say, that the distance betwixt two bodies is known, among other things, by the angles, which the rays of light flowing from the bodies make with each other. 'Tis certain, that these angles are not known to the mind, and consequently can never discover the distance. The second error may be found in Vol. I. page 396, where I say, that two ideas of the same object can only be different by their different degrees of force and vivacity.[1] I believe there are other differences among ideas, which cannot properly be comprehended under these terms. Had I said, that two ideas of the same object can only be different by their different *feeling*, I shou'd have been nearer the truth.[2]

[In the original edition certain passages were here added, which will be found incorporated in the text at pages 328, 352, 357, and 368.—Ed.]

[1] [Introd. § 291.]

[2] [But the 'object' according to Hume can only be an 'impression.' How then, if an idea is always copied from an impression, can two ideas copied from the same impression differ from each other except in liveliness? It may be suggested, indeed, that when the object is a '*compound*' impression, the component parts may be put together in the idea otherwise than in the impression. But if so, the idea would not in Hume's language be an idea of that impression. Cf. Book II. Part I, § 11. 'The component parts of ideas and impressions are precisely alike.' See Introd. §§ 195, 208, and 317.]

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TO

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s. refers to the Sections of the Introduction; p. to the Pages of Hume's text.
f. means 'and following sections' or 'pages.'

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